

INDUSTRIES IN READJUSTMENT

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EDITOR: CLYDE L. KING

ASSISTANT EDITOR: C. H. CRENNAN

ASSOCIATE EDITOR: H. W. DODDS

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Editor in Charge of this Volume:

CLYDE L. KING, Ph. D.

Editor in Charge of Part IV:

CHARLES E. REITELL, Ph. D.



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FOREWORD

Industries are always in a state of readjustment. The changing ratio in demand and supply, the development of new commodities and of new markets, the effects of a changing purchasing power of money, progress in marketing and retailing and the opening or closing of marketing channels;—these and other forces in normal times force readjustments in and by industries. The rapidity of those adjustments and the risk involved in them are greater just now, and hence the topic is of peculiar importance. Of special interest is the work of readjustment going on in the United Kingdom as typical of the more difficult reconstruction problems of those countries longer at war than was the United States. (Part I.)

For years many social and economic forces have been at work to cause a readjustment in the relations between capital and labor by creating new social standards as to what purchasing power constitutes a fair living wage and a fair opportunity for the expression of all the normal human instincts. The securing of these standards involves a new bargaining relationship between labor and capital. (Part II.)

The world in ideals and in facilities for communication is now more nearly a unit than were the colonies at the time of the adoption of the American constitution. In the days of the cable and the wireless, international business coöperation becomes as vital as was national business coöperation to the United States but little over a century ago. To meet both national and international needs there must be that new relationship between governments and business by which the industrial equipment can find its maximum output at minimum cost. The spirit of Anglo-Saxon industrial institutions is to preserve the usefulness of competition. The plane on which competition shall take place has been constantly elevated by social concepts of justice. With the change in the plane of competition has come a change in its form, and hence in the real tests of what constitutes fair competition and what is an unreasonable restraint of trade. The competitive unit is broadening beyond nations, even to include the

zones of climate, the favorable locations of continents, and racial standards and ideals. This readjustment in the form and field of competition is accompanied by a movement to fit form of government to the changes in industrial functions by giving to administrative bodies wider discretionary powers over competition and restraint of trade, in lieu of leaving this function to the hardened common and statutory law as enforced in the courts. (Part III.)

The standardization of weights and measures as a prerequisite to the free flow of goods between markets has been recognized as to certain types of weights and measures. But in that class of goods most vital to human welfare—foods—much remains to be done. Internationalizing commerce brings new needs for other standards, such as standardization of motors and machine parts. In this new field of standardization lie the possibilities of a free flow of commodities from one world market to another. Such standardization opens to industries possibilities almost as large and as revolutionary as those opened up by machinery. The same commercial needs that placed in our national constitution a provision for nationalizing weights and measures for interstate commerce now necessitates world-wide standards to keep international commerce mobile. For this new type of industrial standardization the British have a fairly well developed program. The American program is in the making. (Part IV.)

The normality of industrial readjustment and the character and rapidity of industrial readjustment depends upon the industrial and financial outlook. To foresee the future is more difficult and less certain than recounting the past. But every worker and every business man must be a prophet; or be guided by prophets. For it is the business outlook that shapes the business present. (Part V.)

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Industries in Readjustment

By ERNEST T. TRIGG

President, Philadelphia Chamber of Commerce

THE cessation of hostilities in the great European war found this nation as unprepared for peace as it was for war. When the armistice was signed, American industry was reaching that condition where production was beginning to meet the demands of the nation for war supplies. Industry had responded efficiently, promptly, and with a wonderful spirit of devotion to the nation's interest, to the demands which the army and the navy made upon it for war supplies. The various governmental agencies established for the purpose of accelerating military industry found the great industrial establishments as well as the smaller producing units eager to help, willing and anxious to make all necessary adjustments to further the war program.

INDUSTRIAL ECONOMY A WAR ADJUSTMENT

Like the changes which the war brought in the life of much of the nation's citizenry, the changes which war brought to industry were revolutionary. The adjustments were dictated by the call to produce war supplies in quantities unheard of before, to produce manufactured products strange and new. So necessary and so insistent was the nation's demand, that every manufacturing plant in the United States, no matter what its product, though only remotely related to war material, had to heed the call to produce war material or materials of public necessity or go out of business.

New industrial establishments were organized and existing plants were expanded. Vast armies of workers were recruited, taken from their everyday pursuits into new and untried occupations. Wages were abnormally high on account of the abnormal demand for labor. The entire industrial labor fabric was changed. Men whose pre-war occupations had been unskilled or semi-skilled had to be rapidly trained into the highest type of skilled mechanics. The demand for labor, together with the demand of the nation for fighting men made necessary the placing of women in industry in places heretofore exclusively occupied by men.

All industry, war as well as that not exclusively producing war materials, had to adjust its processes and its output to meet the ever increasing shortage of raw materials caused by the extraordinary wastage in war consumption, the inability to import because of the urgent need of shipping for the movement of troops and war supplies, and the general shortage of available domestic transportation facilities. To intelligently direct such adjustments, and make such rules as would cause the least inconvenience to business, the government through the War Industries Board consulted with the manufacturing establishments concerned and obtained their views as to methods of economies in consumption of raw materials before establishing regulations. In many cases where the problems were complex, men standing high in the particular industry were drafted to the service of the government for the purpose of administering the problems connected with their own business. The shortage of labor also compelled many policies of economy in manufacture.

Interesting as showing the trend of industrial economy are some of the regulations made by the War Industries Board which tended to conservation of materials in which there was a shortage, and a general saving in manufacturing processes. The rule that advertising literature should be largely restricted and that publications should be reduced in size effected large economies in the use of paper of which there was a very limited supply. Reducing the number of styles of metal beds and limiting the amount of embellishments thereon effected large economies in the use of steel and brass. Limiting the number of styles of various kinds of agricultural implements effected large economies in use of metals, wood and labor which could be profitably used for military purposes. Limiting the number of package sizes of goods put up in containers permitted the transfer of large amounts of raw materials to important military uses.

An important indirect effect of the economies through the regulations of the War Industries Board was the resultant saving in investment caused by the carrying of smaller stocks by the jobbers and the retailers who were not compelled as heretofore to carry stocks of large numbers of kinds and sizes. The capital so released was largely used for investment in the government's war securities, and so became an effective help in the war program.

THE CHANGE TO PEACE PRODUCTION

November 11, 1918, found the whole industrial war program just reaching its peak-load of productive effort. The whole country was adjusted to its work. Citizens were being converted into fighting men, in large numbers; industry was furnishing the materials needed for the war in quantities satisfactory for the supply of the armies in the field. The factories, the commerce of the nation, were organized for the one big job most effectively and most efficiently, when suddenly came the end of hostilities. The tremendous wastages of materials in the prosecution of the war suddenly ceased, and the nation's industrial fabric was called upon to adjust itself to a peace basis. The vast industrial establishments exclusively producing war materials were faced with the necessity of finding other products which they could manufacture or of dismantling the factories. The change to peace production had to be made quickly because labor had to be taken care of in other than war-time pursuits. Every consideration forbade the permitting of unemployment. Economic conditions made it impossible to immediately reduce the wage scale. Labor had adjusted itself to a high wage scale. Its living standards had been raised, food and other supplies were high, making impossible a reduction in labor's budget. Confronted with the paradox on the one side of a large demand for employment by workers which under ordinary conditions would have brought about a reduction in the labor wage scale, and on the other hand with the necessity of keeping the scale high to prevent serious economic and political disturbances, industry had to face its task of adjusting to peace-time work.

In casting about for markets for its goods, industry found them very much restricted due to the buying inability of nations who had become impoverished through the war. Here also industry must feel the pressure of competition from these same countries who are the large manufacturing countries of Europe. This competition will come not only in its own markets but also in the markets of the world. The European nations have become through the war debtor nations. They are confronted with the driving necessity of exchanging raw materials and manufactured products for gold. Their soldiers returning from the war must be provided

with work, and the starting up of manufacture on a huge scale becomes imperative in Belgium, England, France and Germany.

It is now America's problem to maintain itself as a successful competitor in the sale of manufactured products in the markets of the world, and to provide the millions of war workers and returning soldiers with work. Some shifting of labor will have to be made. Every economic consideration forbids the retaining in the factories of workers who had been drafted for war work from the farms. These must be returned to do their part in meeting the large shortage in the world's food supply caused by the war. Large building projects and public works should be undertaken to take care of labor which cannot be used on farm and in factory.

Industry itself can only survive the strong competition which she is bound to encounter from abroad by increased efficiency. The costs of manufacturing processes must be reduced by doing better, quicker and cheaper the things which are necessary to produce its goods. Every economy in transportation, in making and selling goods must be taken advantage of. Transportation problems, selling campaigns and manufacturing efficiency must be looked at not from a selfish and local angle but must be studied from the broad vision of an international viewpoint. Foreign markets must be established and held in order to keep the nation's flag flying at the masts of American owned and American manned ships, and to provide an outlet for the surplus products which America must of necessity produce.

ECONOMY A PEACE AS WELL AS A WAR AIM

The mobilization for war was successful. Why then should not a mobilization for peace be made along the lines which the war experience has taught are efficient? The war showed the necessity for the exercise of every economy, and this should be the aim in peace times. Intelligent coöperation should exist among those engaged in similar industries to prevent the doing of things through motives of competition which are extravagant and wasteful and benefit no one. The good work of the War Industries Board which pointed out the way for the elimination of useless styles and sizes in manufactured products should be perpetuated and extended to many industries which were not covered during the war. Cheapening of transportation should be effected through

the elimination of duplication, and intelligent distribution. Intelligent thought should be given to the development of cheaper methods of transportation by use of connected waterways, either natural or artificial, but their establishment should be considered from the viewpoint of the nation as a whole and not from selfish and local considerations. Business must receive a larger share of the attention of the government. It must be recognized as an important factor in the well-being of the nation. But this is not intended to suggest government control, or government ownership of any of the agencies of business. Monopolies are not necessary and competitive conditions should be maintained, and the greatest care should be taken that the trend is not toward paternalism. Capital and labor should recognize their identity in interest, and should so conduct their mutual work that the best results may be obtained from all concerned. Labor troubles, whether strikes or lockouts, are wasteful, and where they occur reduce the nation's capacity and efficiency to successfully compete in its bid for the trade of the world.

How can these things be brought about? During the war, industry found that it could solve its new problems itself, for the War Industries Board was an agency representing industry and its personnel was made up of the industrial leaders of the nation. Why then should not industry do so now? Let industrial effort be directed by the coöperative endeavor of men chosen from its own ranks who will consider the problems from a general and national viewpoint. Let these men amplify and continue the work so effectively done by the war service committees of the various industries organized under the supervision of the Chamber of Commerce of the United States of America.

These organizations should form a point of contact with the various governmental agencies either remotely or directly concerned with industrial processes. They should have a voice in the laying out of plans for governmental activities affecting industry, whether national, state or civic, and their influence should be against the spending of public funds for objects not regarded as helpful to industry in a national sense. They should be in a position to suggest that government aid be in a direction which is supplemental to the work they themselves might undertake, and should insist at all times that there be the closest co-

operation between the government and industry, whether affecting the processes of transportation, the production of raw materials and manufactured products, or concerning labor.

The nation's industries must realize that successful competition in the world's markets today cannot result from efforts that are individualistic, but only from the closest harmony and coöperation, first in industry itself and then between industry and the government.

Food in the Reconstruction Period

By J. S. CRUTCHFIELD

Vice-Administrator, United States Food Administration for Pennsylvania

IF food played a vital part in winning the war it occupies relatively an even more important place in bringing about tranquility during the armistice and in the period of reconstruction. The drastic food regulations imposed upon our country shortly after our entering the war were cheerfully accepted on the assurance of Mr. Hoover and the President that the regulations were a matter of a military necessity.

The effectiveness and success of the Food Administration was largely due to the fact that it reached every man, woman and child in the nation, as well as the men, women and children of the Allies and those of the neutral countries dependent upon us. The stimulation of industry and business in the United States so greatly increased the purchasing power of our people that if they had been so inclined they could easily have consumed and paid for a large portion of the food that we exported as well as that which was used. The stabilization of food prices by the enforcement of the law requiring middle men to sell all food products at cost plus a pre-war profit, without regard to market or replacement value, would also have encouraged an abnormally large consumption were it not for the conservation regulations voluntarily observed by the rank and file of our people. The habit of the general public in adapting their diet to those foods which the market afforded, as compared with what they ordinarily demanded, played a large part in bringing about the desired results.

REDUCED INCOMES AND FOOD PRICES

In this period of reconstruction the average income of our workers is materially reduced and advantage must be taken of the habits, acquired of necessity during the war, of substituting the use of those foods which are abundant and relatively cheap in price for those foodstuffs which under normal conditions we have been accustomed to demand. In the exigencies of the present situation there is an urgent demand for statutory regulations

that will afford relief. The people on the one hand wish to be freed from the onerous regulations and exactions of the war food laws in the matter of what they shall and what they shall not eat, and on the other hand be protected against high prices and profiteering.

We are confronted with a condition and not a theory; substantial relief will not come to the public by the enacting of new laws against profiteering. The unalterable law of supply and demand will determine the price of food. Herbert Hoover did not, as some suppose, suspend the law of supply and demand. He persuaded the public to stop *demanding* certain foods in the usual quantities, in consideration of which he was able to furnish what food was actually *needed* at a stabilized and comparatively reasonable price.

The law regulating the profits of middle men without being accompanied concurrently by a voluntary general conservation in the use of food on the part of the public would not tend to lower or stabilize the price to the consumer. Any profits that such a law would keep back from the middle man would automatically go to the producer. This is an indisputable and well-established fact, although difficult to comprehend on the part of many of our best economists. It is a fact which must be recognized immediately not only by the public but by Congress, if the real solution of the present difficulties is to be found and made effective.

The solution of the problem of a decreased income and sustained high prices on many foodstuffs is found in the general adoption of the same habits of substitution and conservation in the use of foodstuffs as were practiced of necessity during the war. He that controlleth his own appetite and adapteth his taste to what the market affords is greater than he that deviseth many laws against profiteering. In other words, this which the public is looking to the law makers to supply them with in the form of protection against exorbitant food prices lies within their own control. Necessity is the mother of invention. Misfortunes and even calamities are frequently blessings in disguise. It would indeed be unfortunate if the valuable lessons in diet and in marketing, which we were just beginning to learn, were not driven home by a continued application during this period of readjustment.

The grossest ignorance exists in this country as to the relative

values of our large variety of foodstuffs. There are scores of different kinds of foodstuffs which can be produced at one-third to one-half the cost of production of the kinds of food which we have customarily consumed. True, it will require perhaps greater culinary skill to prepare these foods acceptably, but it is all within easy reach of accomplishment. Could the public believe this possible by making habitual and general those simple conservation measures which amounted to enough during the war to feed one hundred and twenty millions of our Allies without creating any undue hardship on our own people, they would seek some agency that would direct and lead to such a movement.

The officials of the United States Food Administration in connection with the United States Department of Agriculture, Office of Markets, have formulated a system of publicity which will inform and educate the public to a certain degree, particularly on perishable foodstuffs. Much more needs to be done in the matter of information and education in the more staple lines. This would afford a splendid activity for those organized agencies which developed such a high state of efficiency in contributing to the winning of the war.

There is conspicuous absence of common sense and reasoning in the consideration of the food problems. It is difficult, though perhaps necessary, to make provision for that considerable portion of our people who live one day at a time. No measure has been discovered to assist them,—indeed it may be undesirable to afford permanent help to those people who will not help themselves. There is almost universal complaint on the part of the consumer because of the apparent profiteering on the part of the producer, and a lack of understanding as to why the producer's prices are not regulated. The average family should not be so much interested in the cost of living this week or this month as they are in the average cost of living during the next twelve months, or in fact, as they are in the average cost of living during the entire reconstruction period of several years' duration.

BRINGING DOWN THE COST OF LIVING

Once again let me emphasize the indisputable fact that there are only two ways of bringing down the cost of living. First, by increasing the supply which is accomplished by paying the producer an attractive price for his product. Within a reasonable

time this invariably results in greatly increased production (except for providential interference). Second, by the economical use and wise choice of the kinds of foods consumed—in other words, the voluntary regulation of the demand. These two factors, an increasing supply on the one hand, and a decreasing or well controlled demand on the other hand, will give an average cost of foodstuffs which must be most satisfactory and gratifying.

To expect the food supply and prices to remain on an even level during these abnormal reconstruction days when the whole world is looking to the American market for an undue share of ~~our~~ supplies, would be to expect conditions that obtain in no other department of life. Hence the importance of acquiring the habit of adapting oneself to the supplies in the market and of accepting some of the ups and downs of prices in the cost of living. We must recognize that of a necessity some periods of weeks or months naturally will favor the producer. This will be a period of high prices, which in turn will stimulate increased production. Other periods of low prices, of corresponding length, will favor the consumer and have a tendency to decrease production.

The Food Administration in conjunction with the federal and state departments have also formulated and encouraged the passing of laws which will regulate to a reasonable degree the distributors of foodstuffs. Among other things it is proposed that many classes of middle men shall be re-licensed, particularly commission merchants and the packers. The National League of Commission Merchants at their annual convention in January at Boston adopted resolutions favoring the licensing of the commission business in fruits and vegetables. This will tend to eliminate the tricky and dishonest factors in the business which alike is a protection to the public and to the legitimate members of the trade.

In considering these vital food matters I have purposely refrained from referring to the larger and more unselfish question of conservation and the habits of eating which will best enable us to succor a famine-stricken Europe. It is obvious that what will serve our own economic needs in the matter of controlling the cost of living at home will most effectually aid those millions of stricken humanity in the war-devastated regions of Europe, many millions of whom it must be remembered are suffering terribly from wounds and disease directly due to the war.

Readjustments in the Retail Grocery Business

By A. B. Ross

Market Expert, Pennsylvania Council of National Defense

WITH the formation of the United States Food Administration, it was generally believed that a general reform of the methods of distributing food would ensue. The wish was father to the thought. But the very things which the Food Administration had to do made reform impossible. It was necessary to secure the full coöperation of the wholesale and retail distributors in every step undertaken; and that could not have been done had the Food Administration sought to force reforms in their methods. The best that could be hoped for was that excessive profiteering would be prevented; and this task the Food Administration accomplished splendidly. Even in the fixing of fair prices, however, allowances had to be made sufficiently broad to protect the inept and shiftless distributors, so as to keep the whole machinery in smooth operation for the great purpose in view.

And so we find ourselves, at the dissolution of the Food Administration, with the problems of distribution just where they were before; rather worse, if anything, because of the precedents set in the matter of "fair prices" and the abandonment of free delivery service. Nevertheless the problem of the ever rising cost of food is one which will not down, and its solution one of those which must be found during the period of reconstruction. The world has a debt of \$200,000,000,000 to liquidate. All business is seeking methods which will eliminate waste. And those practices in the distribution of food which cost money yet make no one a profit must be gotten rid of.

The most important raw material which enters into manufacture is the food of the laborer. Nearly half of his wages go for the purchase of food. The bill for inferior food and for food which costs more than it should is handed to the manufacturer for liquidation. The problem roots too deeply to be neglected by our business interests.

EXCESSIVE COST OF BLIND COMPETITION

There are 375,000 retail grocers in the United States, one for every 293 people. In the larger cities this over-development is greater, and there is a grocer for every forty to fifty families. These small groups of families pay for the rent, light, heat, delivery service, losses from bad debts,—for all the usual expenses of running the business,—and furnish a living for the grocer and his family and a profit on his invested capital.

The high cost of food is largely connected with the smallness of these units and their relatively high operating expense. Theoretically, with four or five grocers in the field for every one who could operate economically, competition should promptly bring down prices and eliminate the unfit units. But such is not the case. Faced with the choice of developing a small business at a high margin of profit—of protecting his living in what seems to be a sure way—and the bolder course of going after business by underselling competitors and absorbing their trade, the grocer has chosen the former method. In so doing, he has been compelled to develop competition along new and wholly vicious lines. This competition has taken the form of “free delivery,” loose credits, telephone service, soliciting orders, and other practices, all of which add to the cost of doing business and force an ever-rising margin of gross profit to protect the business. Until within recent years, the retail grocer met all his risks, losses and troubles by charging enough to take care of all such items. The consumer paid for all business mistakes. These were the golden days of the business, largely responsible for the development of the great excess of units therein.

But in the country districts, the mail order houses capitalized the opportunity for taking away the grocer's trade; and in the cities, the chain store entered the field. Both were highly successful; and their success is growing. Yet neither have found even an approximate solution of the consumer's problem, the ways of business being those of unenlightened selfishness.

ANALYSIS OF COSTS OF COMPETITION

The adoption of the “credit” system has been an unqualified curse. The average grocer has neither liquid capital enough nor bank credit to finance his buying operations. He has no license

to assume the functions of a free bank with his customers. When the customer—who has been actively demanding that her dollar be accorded its full purchasing power—accepts credit at the hands of the grocer, it is precisely the same as if she borrowed a dollar of the grocer's working capital to spend in his store. By this operation she destroys the cash purchasing power of her own and her grocer's dollar. Neither gets action at the right time.

It is not in the losses from bad debts, the bookkeeping cost, the billing and collecting that credit exercises its most baleful effect. The grocer with ready cash can buy, on an average, 10 per cent cheaper in the open market than his rival who is in the limited credit class; and this opportunity is absolutely destroyed by the credit system, except in those rare cases in which the grocer has ample funds for his business opportunities. The grocer who extends credit not only becomes a "credit buyer," but a buyer of the most undesirable class, a hand-to-mouth buyer who requires constant calls on the part of salesman and collector, constant small deliveries, a great detail of bookkeeping and close watching by the credit department of the wholesaler. He is the poorest buyer in the whole list—and his customers pay the Scot, for the bill for all this riot of inefficiency is included in the price charged the grocer by the wholesaler.

The backbone of the retail grocery business is the cash buyer. The grocer who extends credit must charge higher prices than the cash grocer. It is true that he gets business by using credit; but it is equally true that he gets undesirable business and drives away his best customers. He trades the substance for the shadow. That credit is not necessary is sufficiently proven by the great success of the mail order houses, the chain stores and the independent grocers who have changed to a cash basis.

"Free delivery," except in the case of those stores which handle an "exclusive" trade and can therefore charge high prices, is without any standing in the court of economics of the reconstruction period. It is ridden to death practically without exception.

The net profits of the grocery business are small. Four per cent on the total business is regarded as a very satisfactory profit. It is high for a business which is actively seeking extension. Even were it possible for the efficient store to hold its delivery cost to the 3 per cent found by Harvard as "efficient" for delivery cost,

this would require a charge of (4 per cent plus 3 per cent) 7 per cent of the total business to cover delivery cost and net profit, a serious and unnecessary handicap for an actively competitive business. Were the expense of the delivery (as above) charged against the goods delivered, a business in which half of the goods were delivered and half carried home by customers would yield $87\frac{1}{2}$ per cent of its *net* profit from the "carry" trade and but $12\frac{1}{2}$ per cent from the delivery trade. In the *average* store, the charging of "free delivery" cost against goods delivered invariably shows that the delivery system is an intolerable burden on the profits of the business; never a contributor, always a thief. A five-cent charge for delivery, in all but exceptional cases, becomes almost instantly, through its direct and indirect effects, a source of income and saving sufficient to make the delivery system self-sustaining, so that the goods delivered yield their just share of the net profits of the business. And this small charge is not resented by the customer provided a reduction in price of some of the merchandise is made so as to refund to the customers the allowance in the mark up to cover the cost of the former free delivery system.

Solicitation of orders, sending out goods on inspection, and other abuses which have crept into the grocery system, all cost money and all make it necessary for the retailer to increase his selling price to cover these unnecessary costs.

THE GROCER AS A FREE BANK

Commercial agencies tell us that 90 per cent of our merchants *over-buy*. But the very essence of successful business is the running of it on *minimums*. In no business is this more important than in the case of the retail grocer. And in no other business is the principle so completely ignored.

Successful retailing of groceries requires a speeding up of the stockturn or turnover. The Harvard analysis finds that a group of efficient grocers made twelve turnovers a year, once a month. But a turnover to be a sound business turnover must be complete. If the turnover is monthly, whatever remains on the shelves at the end of the month is a burden to the business. It is potential profit in slow moving or dead stock which pays no bills and gets the grocer nowhere unless it be towards the sheriff's office.

The true theory is that every dollar invested in the business should make its share of the expense and net profit of that business within the turnover period of the business: that dollars which do are profit makers and dollars which do not are profit takers. What the business needs is not a general turnover each month of an amount of stock equal to the year's average carried, but a particular turnover of everything within its proper turnover period. Each dollar must pay its way and earn its 4 per cent or 5 per cent a month or it has failed in its relations to the general business. In other words, the grocer who is striving for twelve turnovers a year and who buys any article in quantities for more than a month's supply, is not acting as a retail grocer at all; he has strayed beyond the realms of his own business.

As a matter of fact, the grocer too often buys for his shelves, his storage, his pride, his hope—for anything in the world except his turnover. And when he lays in a supply of canned goods, or fruits, anything in fact which reaches beyond the requirements of his turnover, he is simply acting as free banker for the food manufacturer and the wholesaler. And the policy of the wholesale business is to saddle its customers with these burdens which should be carried, in large part, by the borrowing power of the foods as collateral, reinforced by trade acceptances.

The arguments used by the wholesaler to shift upon the retailer these burdens which he should not assume are as old as the hills and apparently as safe and trustworthy. Indeed, it is a curious commentary on the wholesale business that it has not worked out a plan whereby it can *sell and serve* those outlets on which its own life depends so absolutely.

THE ILLS OF COMPETITION AND ENLIGHTENED COMPETITION

The wholesaler has laid unnecessary burdens on the retailer; his methods of competition have not been protective but destructive. His policy has been to deceive rather than to serve; to take all he can get and give as little as he must. He has developed his own business along unsound lines. The retailer, saddled with burdens from which he should be free, not understanding the fundamentals of his business nor its legitimate methods of finance, has sought to extend his trade, not by serving the best interests of his customers, but by fooling them into believing that he was

giving them for nothing services for which they have had to pay at ruinous rates. Neither the wholesaler nor the retailer has sufficiently considered the true interests of the consumer, nor sought to develop those services which ordinary enlightened selfishness dictate as the real foundations of business. The wholesaler has lost sight of his obligation to the retailer; the retailer has failed to appreciate his obligation to the consumer. Instead of "giving to get," both have emphasized, in a self-destructive and unintelligent way, their single desire and purpose to "get."

The inefficiency shown in the average grocery store is almost appalling. It is not departmentalized in its arrangement of goods; it has no system to minimize labor in handling, no system of stock-accounting; its bookkeeping is crude and general in character, furnishing at best general statistical information where particular information is imperatively needed. It fails to make use of those agencies for advertising, display and selling which have such a marked effect in lowering operating expense. It is operated on guess-work from garret to cellar. The average grocer cannot even approximate the cost of operating the various parts of his business, nor tell which is making him a profit and which netting a loss. The crying need of the business is a clear-cut, definite *system* as nearly self-operating as it is humanly possible to make it.

It is impossible to operate the small grocery units of today except at a high margin over actual costs and a ruinous cost to the consumer due to causes already discussed. It will be necessary to rid the field of a majority of its present units if prices are to reach their proper level.

The cure for the evils of blind competition is enlightened competition. The store which today is doing a business of \$20,000 can cut its operating expense in half by trebling its business. It can, by abandoning credit and free delivery, by a judicious use of its resources and a development of banking credits, and by a thorough mastering of the principles of its turnover, put itself into the most desirable buying class, and buy 10 per cent cheaper than its inefficient rival. It can develop a self-supporting delivery system; it can make a sane use of the telephone; it can reorganize the interior system of doing business; and it can compete successfully with its most dangerous rival, the chain store, in the matter

of prices while retaining its "store personality" and giving the women those services which they require and to which they are entitled.

But to do this, the grocer must wholly abandon the evil practices of the past and devote a part of his time and brain power to considering the wants and requirements of the consumer. To develop volume of business the grocer must develop to its limit real service to the consumer. And the first thing he must do is to get a grip on the facts of the business, definitely abandon the old plan of guessing, and run the business by such rules as the facts indicate. There must be a complete change of the prices charged, not always down, for the facts of the business will not indicate a universal lowering of prices, but decidedly down on those articles the price of which is always highly competitive. For the first service demanded by the women today is that of lowering the cost of food.

THE ECLECTIC SYSTEM

It is probable that in the competition of the future, the old doctrine that "honesty is the best policy" will find its way into the systems of the mail order house and the chain store. Certainly it will in those localities where the independent grocer has courage and intelligence. In this event, the independent grocer's advantage as a competitor for business will be even greater than it is today. But there are lessons for him in the systems of the mail order house and the chain store which it is well to take to heart. Both systems have made use of their study of the habits of buyers; both have avoided business pitfalls which the average grocer still finds in his path.

The self-serve store, with its automatic salesmanship, also carries its lessons. While it is of limited application, the principle of saving the time and labor of selling by allowing the buyer to do a part, if not all, of the work, is well worth incorporating in most of the groceries of today, not as a compulsory self-serve, but with such modifications as make it a privilege instead of a burden to the women.

Of course the system will vary with the locality and character of the trade; perhaps to a certain extent with the individual grocer. But the system which will survive, which will absorb the business

of its competitors and build a sound economic unit from the wreckage of those units which are incapable of justification, will departmentalize the store, its bookkeeping and stock-accounting; will buy for its turnover; will, in most cases, furnish a five cent delivery system, routed and scheduled for a single delivery a day; will pay its good clerks a bonus on extra business and incontinently discharge its inefficient clerks; will extend every service and courtesy consistent with low prices and reasonable profits, and avoid whatever tends to disturb its position in its community as the store which gives more for a dollar in goods and service than any of its rivals.

Readjustment of American Industries through the Development of Foreign Trade

By WALTER F. WYMAN¹

Chairman, Boston Export Round Table

THE future index of the domestic prosperity of the United States will be the volume of the exports of its manufactures. With production capacity, fabricating skill and merchandizing ability all in excess of domestic requirements, the solution to the kindred problems of maintaining domestic financial stability and absorption of available labor lies in a constant enlargement of our export tradings.

Fortunately our foreign trade—both exports and imports—can be tremendously increased. It is entirely a matter of national vision. Merchandise, transportation, banking facilities, selling ability and sources of accurate and complete information on foreign markets are already in existence. There is no need for alchemy. The one need is the enlargement of national vision to include foreign trade as a national necessity and not as a national plaything.

There are today thousands of converts to our need of international commercial exchange. The immediate requirement is positive action and not academic acquiescence in truisms. The full idea has not yet been merchandised to the manufacturers of the United States. Attention has been attracted to foreign trade. Desire for possession has been aroused. But only in a small, almost negligible, percentage of cases has positive and progressive action taken place.

The export trade of the United States today is in the same position that the Panama Canal occupied in 1900. The idea of an Isthmian Canal had then attracted a country-wide attention. Its possession was desired as a national asset. But constructive action of the *inevitably right nature* had not resulted. Today we are unquestionably headed in the right direction in our export trade. We have advanced further and more sanely than the De

¹ A biographical sketch of the author is given on last page of this article.
THE EDITOR.

Lesseps project ever did at Panama. We have made and are still making our individual and governmental mistakes, inevitable mistakes which are often a credit because they are mistakes of the pioneer in his endeavors to find new routes and new methods.

In the past the export trade of the United States has been conducted solely for private profit. Its communal and national benefits have been resultant by-products of the correctly selfish endeavor of our exporters. In the new era we must, as a nation, recognize that the beneficial by-products of foreign trade are immensely valuable to the economic life of the United States. We must, as a nation, make selfish private profits from overseas sales easier to obtain. We must, as a nation, recognize the value of intelligent coöperative efforts by our manufacturers in their quest for new markets beyond our borders.

NECESSITY FOR INCREASING FOREIGN TRADE

There are several definite goals for which we must strive. The first is the abolition of non-employment of the able. The second is the conduct of business at a profit which will make possible remuneration of workers in keeping with the present and future living cost and living standards. The third is the complete utilization of existing production capacity of plants completed and under construction. The fourth is the establishment of safeguards which will make these three conditions permanent. Seasonal industries must be made into full year industries. Domestic depressions must not come in decade cycles.

A consistently increasing foreign trade is the agency through which these goals can be reached. Through international commercial exchange the United States can abolish unemployment of the able, completely utilize existing production capacity, make possible the continuance of high scale remuneration of workers and automatically ensure permanence of these admittedly desirable conditions.

These statements are mere assertions unless backed by concrete illustrations. In the field of manufactured products it has been carefully estimated that a twenty-five per cent increase in gross sales—this twenty-five per cent to be in foreign trade—offers a sufficient factor of safety against domestic financial depression for the individual enterprise. Still keeping in the field of completely finished merchandise, it has been estimated that a twenty

per cent communal export sales volume ensures the community against trade depressions. This refers particularly to a "shoe town" such as Brockton, or a "shirt and collar" town such as Troy. Similarly, it is estimated that a national foreign trade sales volume of sixteen per cent will bring into this country from without, a steady volume of payments which will absolutely prevent a national depression.

In terms of unemployment of the able a five or ten per cent figure is a national calamity. An increase in our national export sales volume of sixteen per cent will more than absorb even a ten per cent figure of unemployment of the able. For increased foreign sales volume necessitates greater employment not only in production but also in clerical transportation, finance, forwarding, institutional and scores of other broad avenues of enterprise. It means, for examples, long-continued years of shipbuilding, of a commercial navy of men as well as tonnage, of vast foreign freight terminals in every suitable harbor and of export technicians as a rule rather than as a rarity in business enterprises.

It means maintenance of remuneration of workers, for foreign trade is conducted at a profit in these days of sane merchandising abroad. It means profits to divide, because the added volume both in production and sales can be handled at a lessened per cent of overhead. It means maintenance of remuneration because it means steady employment without seasonal lay-offs. It means a full year's work at a full year's pay as opposed to alternate periods of employment and unemployment. It means a balanced income in place of the opulence of overtime followed by the poverty of job seeking.

The world beyond our boundaries will not force its patronage on us indefinitely. We cannot count on natural growth alone of our foreign trade to free us from our present dangers and to solve forever our vexed economic problems. It is time for us to make a national inventory of our assets and liabilities. It is surely not too early for us to determine our needs mental and physical. It is fast becoming imperative that we shall become cognizant of the mechanics of exporting and supply some missing parts, improve and strengthen others and drop hit-or-miss methods both individual and governmental.

EDUCATION AND EXPORT

The first stage in the accomplishment of the truly herculean task is educational. The man behind the ballot must be acquainted with the national necessity of exports of manufacturers. Public attention must be definitely focused on its individual and national benefits. I venture to suggest that President Wilson proclaim a Foreign Trade Day and that the Secretary of Commerce be placed in charge of the educational factors of its observance. This foreign trade day is not suggested as a non-work holiday. The preparations for a foreign trade day could well include a presidential proclamation of explanation, preliminary education through the "Four Minute Men" and the concerted and coöperative efforts of the press and trade bodies.

This effort to bring home to the people as a whole the importance of our international commercial exchange should be supplemented by a vigorous and sustained effort to imbue every trade organization, every board of trade and chamber of commerce with their peculiar opportunities for service. Foreign trade committees should be brought into being in every manufacturing town and city. The honorary and purely ornamental existing committees must be vivified or revived. Local and national organizations of sales executives, bankers, credit men and advertising men in particular must rise to new levels of coöperative and national service and create rather than follow demand for knowledge.

Simultaneously with the education of the voter there must be a better education of the youth of the United States to the wonderful world of business. Misconceptions by the score are fostered by our present educational methods and text books. Even in schools frankly practical in their attitude toward domestic business there are grave errors made daily in their teachings which relate to foreign countries and our comparison to and relations with these. I do not ignore the work which is still being carried on by the Commissioner of Education. I merely insist that it is more important to the future of the export trade of the United States that school children come to think of Shanghai and Canton in terms of possible profits instead of pigtails, and of Bangkok as a city of electric lights and street railways rather than a source of Siamese Twins.

Exporting is selling the whole world. This truth must become

a matter of national acceptance. Two decades ago "exporting" meant selling to Europe. Today it means, to the mass, selling to South America. Until our national vision is broadened so that we know instantly the markets of South Africa, the Far East, Russia and India, we must remain far short of our easy possibilities in profits and insurance from foreign trade. Not two score of the several thousand exporters of the United States are "selling the whole world." Many exporters have not even a customer in India, although their sales in Brazil and England may be almost unbelievably large. Few enterprises have had both vision and courage. This condition is one which must be remedied if we are to attain world leadership.

THE PROBLEM OF TRANSPORTATION

The concrete problem of the moment and of the future is transportation. The clearest and broadest vision, the height of skill in making and selling, are powerless unless merchandise can be carried regularly, safely and at reasonable rates. The foreign merchant makes his profit from the merchandise he sells, not from goods illustrated in catalogs or displayed by salesmen. The United States cannot hope for a true foreign trade until its products can compete in delivery service with those of any other nation.

Our whole transportation activities are on an unsound basis. Excellent ports—Boston for example—are neglected, while New York is congested long before the ocean carriage needs of our export trade have reached even a present-day high level. Merely because a port with an excellent harbor, with possible large volume of manufactured articles, lacks bulk tonnage, is no excuse. Foreign trade is our present-day domestic necessity and national need. Bulk tonnage must be diverted to the ports which need it to supplement local cargo. Portland, Boston, Philadelphia, Baltimore, New Orleans, San Francisco, Portland and Seattle, and half a dozen other cities must be developed into true ports with the certainty of receiving not only tonnage of some sort but also of the specific kind of tonnage to complement its natural reservations.

The railroads must do their share both in self-education and in education of their clients. Terminal facilities and dry docks must be taken out of local politics and treated from a national

rather than local standpoint. Every transportation step from the manufacturers in the United States to the merchants in other lands must be investigated and a coherent national and international system of transportation evolved which will carry goods in the shortest possible time and at a cost in keeping with those under which competitive foreign manufacturers operate.

Regularly scheduled sailings, rigidly established and upheld rules for advance space allocations, systematic handling of foreign freight in transit and at freight terminals will be tremendous factors in the growth of our foreign trade. When American manufacturers can promise definite deliveries and live up to these deliveries it will not only divert trade from Europe to us but also gain more trade for us by permitting the exporting manufacturer to devote his whole time to merchandising problems.

FOREIGN BANKING AND FOREIGN TRADE

A new spirit must come into foreign banking. Today the banking interests generally are far more attracted to secure the large manufacturer's large domestic deposits and small foreign transactions than to coöperate with and develop the smaller manufacturer with a comparatively large volume of foreign sales. The banking interests of the United States need, with the manufacturer and the man behind the ballot, a broader vision. The banks must work hand in hand with the exporter. They must cease to consider our foreign trade a matter of foreign exchange or a means to increase domestic deposits. They must educate the exporter in the finer points of draft usage and they must come leagues closer to the manufacturers' problems, in the solution of which they can often be of decided service.

There is no question of the ability of American bankers to become the new standard of the world. It is merely a question of the direction of energy. The *average* English bank today in many ways is daily doing more for exporters than *any* American bank—barring three exceptions. This is not because of any qualification except a better knowledge of values. The English banks know what their customers and what their customers' foreign customers really need in emergencies. They automatically and without self-praise perform functions that are appreciated by less than half a score of our banks.

There is already in the field of credits a realization of the national importance of foreign trade. The National Association of Credit Men has worked hard and well in the last five years. Much has been accomplished and the road has been opened to still further accomplishments. The vision of the National Association has been shared by several at least of its local units. The largest conference on foreign credits ever convened in any country was held in Boston last year under joint auspices of the Boston Export Round Table, the Boston Credit Men's Association, the National Association of Credit Men, the National Association of Manufacturers and the Philadelphia Commercial Men's Association. The subsequent activities and the definite steps toward still further improvement in technique and coöperation with export merchandisers form one of the most significant and pleasing factors in our new foreign trade building:

LACK OF WORLD-WIDE VISION

The one present-day weakness on the selling end of export trade comes from lack of world-wide vision. It is the reluctance to send representatives to new markets and consequently the placing of too great reliance upon correspondence, advertising and samples as selling weapons. It is entirely true that it is well to prepare the ground in advance of a salesman's visit, but it is also true that there is waste in over-preparation. One of the important truths our government has learned is that to know, one must go. Our commercial attachés, our market investigators and our trade commissioners all are visible proofs of governmental belief in sending able, trained men abroad.

Because of the time element—for we must not postpone our export future—it is imperative that American manufacturers send now to the four corners of the world men in whose judgment and selling ability they have every confidence. These men will save a half decade as against the most rapid development by correspondence. In lines where service is a most important element—automobiles and dictating machines for example—these men can save not only time but also avoid perfectly natural mistakes which from long range are inevitable.

Before the next five years pass we shall see "tonnage men" sent out not merely by steel and oil but by many industries.

These men will not be salesmen but rather investigators who will chart countries and continents for possible tonnage increases. From the deductions to be drawn from these charts, salesmen can be placed into most profitable localities, living in them at least long enough to bring into being the tonnage reported as possible.

So far we have considered only the obvious. We have seen merely truisms and pointed out opportunities for improvement which are painfully apparent even on superficial examination. The right to assume confidently that because we want an increased foreign trade we will have one, must come from more than a prophecy based on our past or on our desires. Force of circumstance—if we omit our few hardy pioneers in world trade—has brought into being the export trade we enjoyed up to 1914. War-time necessity in foreign markets was responsible for its increase. Force of circumstance is now offset by the imperative needs of England, France, Italy and Belgium for foreign trade. The equivalent of war-time necessity will continue through 1919, but only in decreasing measure.

ABILITY AS EXPORTERS AN ASSET

Our one great asset—the golden key to the massive door that bars the unworthy from foreign profits—is our potential ability as exporters. The United States combines great skill in fabrication with first-hand knowledge of commercial mass production. It combines elimination of waste processes with ability to cooperate with competitors and non-competitors. It combines merchandising skill in securing customers and making them over into co-partners with selling sense which insists that a sale is not complete until the buyer has resold the merchandise or is in some other way obtaining a profit from his purchase.

This asset is not theoretical. It has been repeatedly proved an asset by the successful adaptation of American domestic selling methods and the requirements of foreign trade. So the way to proceed is already charted for us. Individually, communally, coöperatively and governmentally we must first see with broad vision and then advance by use of all our sources of power coordinated and synchronized. We must avoid unnecessary failures by building our export sales campaigns with such a factor of safety that they must succeed. Our advance in foreign sales should be

a steady ascent and not the result of great gains interspersed with lesser losses.

There is yet time for needed improvement in banking and transportation. There is time because it takes months and not days for a foreign sales campaign to fructify. But there is no time for delay. Unless the government will officially, frequently and forcibly make clear not only its approval of the theory of insurance through foreign trade but also prove its own desire for foreign trade by deeds as well as words, a great opportunity will pass. The government owes immediate adjustment of the whole shipping situation to manufacturers forced to immediate and radical readjustment to meet post-war conditions.

In our quest for foreign trade we must remember that we must be creative as well as active. We must develop new markets as well as seek to share in the profits from sales to long established markets. We must governmentally recognize this truth and recognize it by regularly scheduled sailings to the lesser markets and to markets now rich naturally but still undeveloped. Our banking and investing interests must seek out these markets, develop interior industry and transportation to seaboard and aid in the financing of port facilities and harbor improvements. These joint efforts of our government, banks and manufacturers can be so timely and so effective that we can rightfully monopolize both the imports and exports of market after market which will grow up in international commercial exchange knowing only the United States as a business partner.

This ideal condition can only be reached by superlatives. We must supply all the needed foreign capital. We must be the architects and constructors of wharves and warehouses—the dredgers of harbors and the erectors of breakwaters. We must supply every want and give ocean service so complete as to bar any rival from profitable competition. Above all, we must do all these things as partners and not as commercial conquerors.

There are today millions of square feet available for production for export sales. With the woman in industry and an army demobilizing, our labor potentialities are fully equal to the production space available. Through the government's own banking plan, money can be made available to finance an export trade of more billions than we can readily obtain. More and more the

American youth is being privately and publicly trained to know the surface differences which identify foreign trade. There has never been question of executive ability capable of supervising the broader details. Export managers and export technicians are constantly increasing in number. Most decidedly through experience gained in overcoming war-time difficulties they have been growing in ability and now outrank Europe's best.

We must make all export efforts of cumulative value. Each new customer for any American-made product must be so treated as to become a prospective customer for other American-made products. Each customer must become a form of salesman for American-made goods by his commendation of our merchandise and our policies in trade. We need not experiment and we must at any cost live up to our promises both of sales assistance and ocean carriage schedules. This means that our promises shall be made with the intention to perform, even though immediate returns may not prove all that we anticipate.

INDIVIDUAL READJUSTMENT OF ENTERPRISE

Entirely apart from the concerted action which has just been outlined, individual manufacturers have for months, and in some cases for at least two years, anticipated the necessary readjustment of their enterprise. The great majority of these manufacturers have planned on an increased foreign trade. The majority of this majority have planned to use increased manufacturing capacity in production of new lines—both allied and non-allied. A prominent maker of sporting rifles has plans already under way for exportation of a line in no way related to firearms. A manufacturer of brass parts plans to use four or five plants purchased or constructed during the war in making completed, trade-marked articles for world-wide distribution.

It is significant that many makers of parts, who are barred by tacit agreement with domestic customers from marketing completed articles for the domestic market, are now engaged in export advertising campaigns and plan to make their brands known abroad even though barred at home. Wholesalers as well are reaching out and selling abroad branded lines. This is particularly true of jobbers in cities which cater to the trade of Western Mexico and Central America, and to a lesser extent with jobbers

whose export sales efforts are naturally directed to the Far East. More and more the large domestic sellers of dairy products are seeking foreign markets notably for condensed and evaporated milks. This is an obvious variant of the seasonal business seeking balance by export trade.

The United States has no real choice. Either it must be content to face nation-wide unemployment or it must be a serious exporter. The one way that it can become a serious exporter in competition with England, France, Italy, Belgium and later on with Germany lies in the acquisition of world trade ambitions by myriads of American manufacturers.

Foreign trade cannot be legislated into existence. But the government should so use its transportation control within and without the United States that the exporter will be able to serve his customers. For foreign trade is international service. It entails obligations as well as privileges.

It cannot be but a few years more before an International Foreign Trade League and an International Court of Foreign Trade are established. They are necessary supplements to any council of world politics. When these two bodies—the first legislative and executive and the second judicial—are convened, the United States should be prepared to assume full memberships in both. Its claims will be based not on our war record sales volumes but on our post-war volumes and methods.

Shall we then and for decades thereafter be ranked as worthy? The answer as well as our place in the world cannot yet be given. The next few years will render argument unnecessary.

WYMAN, WALTER F. Tufts College, 1901. Sales and export manager, the Carter's Ink Company. Chairman Boston Export Round Table; chairman Export Club of Boston; honorary president Export Managers' Club of New York; vice chairman Committee on Foreign Credits, National Association of Credit Men, Committee on Foreign Trade National Association of Manufacturers, Committee on Foreign Trade, Association of National Advertisers, Inc.; chairman Committee on Educational Exhibits, International Trade Conference 1916; chairman Foreign Credits Conference 1917; chairman War Trade Board Conference 1917; chairman Foreign Banking Conference 1919. *Publications*: "Direct Exporting," "Utilizing Time," "History of an Export Order," "Henryville Stories," "Selling American Goods to the World," etc.—THE EDITOR.

Thrift and Readjustment

By ROY G. BLAKEY

Associate Professor of Economics, University of Minnesota

THE problems before us are more or less familiar to all, in name at least. Millions of soldiers and millions more of civilians backing them up have been engaged in work which the signing of the armistice has made useless. They cannot continue this work,—neither they nor we can afford to have them do nothing. They should be added to the existing labor supply, the productive energy of the nation, not in a manner to take away the work of others and cause idleness or unemployment, but in such a way as to produce an additional amount of goods and services somewhat proportionate to the amount of labor added to that already engaged in the industries of peace.

Modern production is carried on mostly by machinery. Old machinery not of a character to aid in the war probably has not been kept in good repair and practically all of the new has been constructed for war purposes. Some of the latter can be converted easily to peace-time production, some can be changed only at a considerable cost, some will be nearly a total loss.

It is easy to say that this labor and plant must be converted to peace uses; it is another thing to bring about a proper readjustment, a readjustment that keeps all parts of the industrial machine working in unison while it is turning out the proper kinds and quantities of goods and services, that is, turning out such quantities of such varieties that they will exchange on such bases that the industrial machine will be kept going at the maximum of efficiency.

Some have suggested that there may be an oversupply of labor; this is one of the most persistent and mischievous half-truths of all the half-truth clan. One might as well say there is too much capital or too much land, or too much water. In a certain situation there may be too much land to go with the amount of water or labor or capital or something else available at just that place and time; it is largely a question of proportion. So there may be too much labor in some particular case to mix to advantage

with the other ingredients or factors of the local industrial situation. But so long as men have wants that are unsatisfied and which can be satisfied by working there can be no general oversupply of labor. For all practical purposes, the economists are correct in assuming that human wants are indefinitely great, that as soon as some are reasonably satisfied, other and usually larger ones take their places. A boy longs for a bicycle; by the time he gets it, he wants an automobile, a yacht, an aeroplane. There is no limit to wants—hence no limit to labor to be done. The difficulty is in connecting up the man and the job under proper conditions.

The fundamental features of our present industrial régime which are essential to have in mind for present purposes are division of labor, large-scale machine production, and organization and management by captains of industry who pay wages to laborers for their services and who buy their raw materials and sell their finished products in a more or less competitive market. Production is for the market and for a profit. In the case of both managers and laborers, expenses and income take the form of money prices, prices for goods and prices for services. It is assumed that for the most part, any one is free to buy or sell goods or services wherever and whenever he can do so to his own best interests. It is assumed, also, that the free play of competition in the selling and buying of goods and services for money prices to secure individual gains, with only a minimum of government regulation, will result in a greater balance of gain to society than would general regulation by a king or by government officials whose limitations have so often been proved in the past.

PRICE THE REGULATOR

It is important to see that in this competitive industrial régime the governor or regulator of action is price, future or anticipated price. Shall the managers of railroads, of steel plants, of building operations, of this or that enterprise, order this or that quantity of raw material, take on this or that amount of additional labor or let off part of what they have?

The answers depend upon what prices will have to be paid now and in the future for labor, raw materials and other factors in production and what prices will be received ultimately for fin-

ished products. Some of the returns on this year's expenditures may be received this year, but in many instances, as for example in the cases of expenditures for the construction of railroads and factories, most of the returns will be strung out over many years, often for several decades. Every manager who does not make a sufficiently good estimate of the thousands of prices involved in the near and distant future leads his enterprise, not to profits, but to bankruptcy. Every laborer who misjudges the operations and results of the industrial complex, most of which are both causes and effects of prices, fails to profit to the maximum in securing the best prices for his services; in fact he may, at more or less frequent and prolonged intervals, be idle and unproductive. Bankruptcy merely takes a different form in his case.

Future prices are uncertain at all times. The annual lists of business failures, labor disturbances, losses, unusual profits, etc., are sufficient proof of this. The European war, with its extraordinary demands, its accompanying inflation of credit, its partial regulation of prices and its many other imponderable influences, has brought about a situation which makes future prices much more uncertain than they usually are. Nothing of importance that one can mention, whether it be the reaction from government control, labor unrest, Bolshevism, the league of nations, the German indemnity, or what not, is without significant influence on future prices which are now governing industry's plans for the near and distant future.

When men are in doubt they hesitate to go forward; when the road ahead suddenly becomes extremely uncertain or filled with obstacles, they suddenly shift to lower speed or even throw on the brakes and come to a dead standstill, thus blocking the progress of every one else. The war has raised prices to an enormous height. Some are relatively much higher than others, but all are high. Now that the war is over, exactly what is going to happen this year and the next and the next to this, that and every other price, including wages, the price of services? Give a definite and authoritative answer to this question, one which everybody can accept with assurance, and the industrial machine will immediately begin to regain momentum. If to certainty could be added industrial and social equity, even the war-time speed could be exceeded.

Let no one misunderstand us to say that high prices are the cause of all evils for they are far from being the only obstacles to readjustment. In fact, we could soon become adjusted to prices at almost any level if they were relatively stable. It is because prices have been made so high by temporary circumstances that their future courses are extremely uncertain. Even if prices were stabilized there would still be many problems to solve, hence in emphasizing the importance of giving more stability to prices there is no intention of over-emphasis nor is there any belief that any remedy will prove to be a panacea. But it is true not only that the giving of more stability to prices would help materially in our industrial readjustment but it is true also that a very simple, effective and old fashioned remedy can easily be adopted by the American people if they appreciate its efficacy and the desirability of its use.

MONEY AND CREDIT INFLATION

Before any cure is suggested, the cause should be recalled. Why are prices so much higher than before the war? The war's demand raised the prices of those commodities badly needed for war purposes but the same cause would tend to lower prices of goods not needed for war. As a matter of fact, nearly all prices have risen. In other words there has been a *general* cause affecting all commodities and in the case of prime war necessities there has been an additional cause, so that prices of such goods have risen the most unless kept down by government regulation. Hence, the ending of the war removes one of the main causes affecting war necessities, though the present need of food and re-equipment, especially in Europe, will be a large, unusual and somewhat disturbing factor for months to come. But the chief cause of the general rise in prices has been credit inflation.

Put in another way, there has been too much borrowing rather than saving to secure funds. Borrowing increases bank credit which takes the place of money. Money is a counter or ticket used in exchanging goods. If the number of meal tickets is increased more than the food for which they are exchanged, each ticket becomes worth less, or more tickets have to be given for the same meal. If money, or bank credit which takes its place, is increased more rapidly than business, or than goods for which money is

exchanged, then each ticket or dollar becomes worth less or it takes more tickets to get the same goods. Prices go up as we say. An increase in money and bank credit proportionate to the increase of business or goods exchanged will result in little or no change in prices, other things remaining equal.

An appreciation of the cause suggests the remedy. There is no way to eliminate the inflation except to produce and save a surplus so as to restore the former proportion between goods and counters. The production and saving of goods enables one to pay off his debt and thus cancel that much bank credit. If no debt is paid, the creation and saving of goods increases the proportion of goods to money counters and thus helps to reduce inflation. But before going further it might be well to note a few statistics indicating the extent of the present inflation.

The total general stock of money in the United States in millions of dollars was 3,736 on August 1, 1914, at the beginning of the European War; 5,312 on April 1, 1917, when we entered the war and 7,781 on January 1, 1919. The above figures include (1) money held in the Treasury as assets of the government, (2) money held by federal reserve banks and federal reserve agents against issues of federal reserve notes and (3) "money in circulation." If we take only the money in circulation for the three dates above, the figures are 3,367, 4,702 and 5,951 millions of dollars respectively. Expressed in terms of percentages, the general stock of money for the three dates is represented by 100, 142 and 208 and the money in circulation by 100, 140 and 177.

The loans and discounts, plus overdrafts, bonds and other securities, which are mostly sorts of loans, for all banks in the United States (except federal reserve banks) in millions of dollars were 20,924 in 1914, 28,645 in 1917 and 32,316 in 1918. In other words the most important items of bank credit show an increase of 37 per cent between 1914 and 1917 and a still further increase to 54 per cent in 1918. Complete up-to-date figures, if available, would doubtless show a further increase.

The United States Bureau of Labor Statistics takes 1913 prices at 100 as the basis of its index number for principal classes of commodities in the United States. The following approximate figures indicate how general prices have risen:

	1913 (Basis)	Aug. 1, 1914	Apr. 1, 1917	Jan. 1, 1919
Wholesale prices.....	100	99	171	200
Retail prices.....	100	102	145	187

According to the same authority, rates of union wages per week, full time, have risen from 100 in 1913 to 112 in 1917, and to 130 in 1918, the wages for May when annual contracts are annually made being taken in each year.

The effects of the money and credit inflation in the United States are confirmed by the experience of Great Britain and other countries. For example, the bank note circulation of the United Kingdom increased 157 per cent from July 1914 to November 1918 while general prices increased 142 per cent. There can be no doubt of the inflation nor of the effect of inflation upon prices.

This inflation has made the government's expenses higher and its war debts more enormous. Wages and salaries which have not risen as fast as prices buy less than before the war. A thousand dollar insurance policy, if paid now, would buy little more than half what it would have bought if paid five years ago. The long-time investments of savings banks, insurance companies and others bring in the same number of dollars in interest as formerly but the dollars have less purchasing power and the capital or market values of the investments themselves have shrunk. In the interest of all recent contracts there is reason for continuing inflation so that the contracts may be settled on an unchanged price level; in the interest of pre-war obligations the argument is for a return to the pre-war price basis. For example, war debts could be paid more easily with cheap dollars if the present inflation were continued than with dear dollars if there is much deflation. There is even much argument for the continuation of inflation as means of meeting the extremely difficult problem of wage readjustment. It would certainly smooth over some psychological obstacles, though it might not improve the equitableness of the general situation.

But there are weighty reasons against continuing the present inflation. In the first place it threatens the gold standard upon which our monetary and banking systems are based. Why all the anxiety over the decline in gold production? The reason is that financiers are fearful that if much more credit is added to the

base of the inverted pyramid the present gold reserve which forms its apex will be too small and narrow to keep it from tottering. This is in spite of the fact that there are now over three billion dollars of gold in the United States as compared with less than one billion nine hundred millions August 1, 1914, an increase of 60 per cent.

As mentioned above, to keep prices stable, money and substitutes for money should increase at about the same rate as the increase in the production of goods. Even before the war, gold output and credit based upon it were increasing more rapidly than goods so that prices were rising. It is estimated that during the war our production of goods increased by 20 or 25 per cent but our money and credit by over 50 per cent, so that prices have risen more rapidly than ever. If paper money or bank credit were always generally acceptable in exchanges, as they have about come to be in the United States, and if the amounts of the same were always kept proportionate to the amount of business done, use for gold would be for the arts only and most of the human energy that is devoted to prospecting and mining gold might be turned to the production of wheat, shoes, houses, and other necessities which so many of our people lack. One of the chief reasons why we cannot cast gold aside and rely on paper or fiat money is that no set of legislators has ever been found that can resist the temptation in times of stress to raise money in an easy way. Why levy burdensome taxes when the printing press can turn out a wagon load of money in an hour? Of course, this is increasing the counters without increasing goods produced. It is inflation with all of its evil consequences.

Gold is a better money because it is so difficult to discover and dig out; the cost puts a limit upon the output. The more the output is limited the more each ounce is worth; as it becomes worth more there is greater inducement to increase production until each ounce becomes worth less. Then production is checked. Thus there is an automatic regulation of gold as a monetary basis. But so long as legislators possess their present human frailties, there can be no such regulation of paper money output except by making it redeemable in the costly gold.

The high prices caused by the recent credit inflation make gold costly to mine, hence we hear a good deal about stimulating gold

mining by means of premiums or tax exemptions or other bonuses. Such measures are foolish; they try to destroy artificially the automatic and salutary regulation of gold production mentioned above. The trouble is not that there is too little gold in our reserves, but that the gold we have is called upon to hold up too large a volume of inflation. Reduce the inflation and promote stability instead of adopting artificial measures which in the long run are apt to act as boomerangs.

There is another important reason for checking and decreasing inflation. That is foreign trade which, of course, includes European reconstruction requirements. Devastated European and other countries need our goods, the former especially need them badly. Large foreign orders would allow many American plants to run at 90 per cent instead of at 60 per cent capacity and would give employment to thousands of men and either directly or indirectly would stimulate agriculture, mining, transportation, and every other industry in the United States.

But foreign orders are not coming here in quantity for two main reasons, first because of lack of means to pay for American goods, second because of uncertainties, especially, high and uncertain prices. How shall the war burdened European countries pay for American goods? They cannot well spare gold. Their credit inflation exceeds ours. It rests upon a smaller apex of gold reserve. Besides we do not need their gold. More would result in higher prices here and consequently fewer orders from them. They can pay partly but not entirely in goods which they may send us. Inasmuch as they cannot spare their gold to pay for the balance, if we are to ship the large quantities which we should for the sake of our own interests as well as theirs, we must arrange to grant them credit. This means that America must send them goods and accept pay later; in other words, that America must produce and save a surplus for export.

But with prices as high and uncertain as they now are, foreign as well as American enterprisers hesitate to buy. Their expenses and capital investment might easily be so great that when lower prices come they could not meet interest and other costs. They would be in danger of having losses instead of profits; in fact, many would probably end in bankruptcy, and in the long run it would not be wise for American investors to finance such undertakings

on the present price level. It is obvious that the development of a stable and solvent foreign trade would be a big step in the solution of our immediate readjustment problems and would bring in dividends for years to come, to say nothing of the immense benefits to devastated Europe.

THRIFT THE REMEDY FOR INFLATION

We have already seen how the increase of money and credit has outrun the production of goods, due largely to the fact that bank credit, that is, borrowing, has increased faster than the production of goods; or, to put it in another way, because the great mass of American people have borrowed to buy when they should have saved, and thus have brought about an unstable situation which is one of the main obstacles to readjustment.

The government expects to have another huge loan drive in April and may have to secure billions in addition through war savings stamps or through the banks later. In so far as such borrowings are not paid out of the surplus production and savings of the people of the United States they will add to the existing credit inflation. Besides the government, the railroads, industrial enterprises, farmers, and others throughout the United States need vast amounts of capital. Inflation and all its evils can be cured in no other way than in the production and saving of goods which will allow the paying off of debts and the restoration of the proper proportion between money counters and goods.

This is no time for checking production, especially production of equipment and other durable goods, nor is it a time to let up in our war on waste. Conservation of resources, planning for the future, wise spending and economy are scarcely less urgent now than before the armistice was signed. The savings movement born of the war should be continued and developed. In fact, there is a pressing need for every agency and person in the United States whether savings bank, insurance company, manufacturer, merchant, miner, artisan, farmer, or individual of whatever interest, to coöperate with the government in its nation-wide campaign to make thrift a national habit.

Making National Debts National Blessings

By SIMON N. PATTEN, Ph.D.

Philadelphia, Pa.

JAY COOKE, the noted financier of our Civil War, invented the maxim: "National debts are national blessings." This seems a paradox and yet its truth can readily be verified. The thought is not that destruction is the motive for industry but rather that necessity is the mother of invention. Men and institutions are too conservative. Controlled by habit, tradition and routine they lag behind the actualities which evolution creates. The world moves on by huge mutations and not by a multitude of minute variations. There is thus both theory and fact back of Jay Cooke's slogan even if war slackers will not admit its validity. The world today faces such mutation, the destructive part of which is already apparent. War debts are its visible evidence. The reconstructions are ahead. World debts are the force which will make us accept the new order.

This world debt may be met in two ways. If we let blind forces decide who shall bear the loss, a great financial panic will occur. World values will fall to a far greater extent than the loss actually incurred and he will bear the burden whose values relative to others fall the most. The nominal bearers of burdens are thus not their ultimate bearers. The French did not pay the indemnity of the war of 1870. The bills were settled by the financial panic of 1873 through which America lost more than France because her values were more inflated and hence less stable. Fix the payment of the present war debt as treaties may, England and America will bear the burden of it if a financial panic determines on whom the payment shall rest. From him that hath shall be taken, is the crude law of panics and who is he who hath, but America? Our war debt and the inflation of money and credit which goes with it amounted to thirty billion dollars. The depression due to a world panic would cost us a like sum. Together our losses would be a quarter of the two hundred billion of values we had when the war began.

So much for one way of meeting a world crisis by paying for the

war by our blood, sweat and suffering and then paying for it again by the disasters which follow in its trail. The other method converts disaster into a blessing by making industrial readjustments pay national debts and in addition create a surplus to enable other long needed reforms to be made. If the new situation stirs our energies, removes prejudices, overcomes conservative stupidity, forces the use of new industrial mechanisms and so modifies our political institutions that they can function in our modern world,—if all these and other available adjustments are made, our children will bless the war instead of regarding it as a curse.

It was the debt of the Revolutionary War that forced the adoption of the national constitution, which constitution, through its benefits, paid for the war without taking a dollar from the pockets of anyone. Again in our Civil War did Jay Cooke's maxim prove its worth. Its debt was paid not by the sweat of labor but by the great inventions of the epoch. The Western expansion, the harvester and the sewing machine and the locomotive, besides paying the national debt, left a surplus for all to enjoy. Shall we face debt as our fathers did by corresponding improvements or shall we cause disaster by stupid inaction? Below is a plan which, protecting industry from loss, would yield a gain for all to enjoy.

EXPLANATIONS

In the plan there is little new. It contains merely a clear statement of the cogent demands of the leading agents in production in language which can be understood and accepted by other agents and by the public. The new is not in these demands but in the way they are to be met. In the past, each group has presented its claims and assumed that their increase of income should come at the expense of other agents. In contrast to this I would find what are the legitimate demands of each agent and then see if these added costs cannot be met, not at the expense of others, but by an increase of industrial efficiency. I make therefore a national budget of increased costs and one of possible improvements to see if the costs of the one cannot be paid out of the surplus of the other. If so each group has an interest in an enlarged production which would liquidate its claims without creating burdens for others to bear. The data I use in this

compilation are those of 1914 unless they are plainly abnormal. All changes and per cents are differentiations from this base.

The urgent demands of the workers are for shorter hours, increased pay, the right to organize, and compensation for risk and disability. The farmers want higher prices for their products but resist the increased prices which the demands of other agents would make. The laborers want more wages at the expense of capital, and employers desire more profits through reduced labor costs. Each group thus assumes a fixed national income but demands an increase of its share at somebody's else expense. The struggle is thus transferred to the area of distribution with all the bitterness which such struggles make.

The national wage bill for 1914 was ten billion dollars. The total national income at that time was perhaps forty billions, wages receiving on the average about a quarter of the value of the goods produced. Another estimate reaches the same result. The population of the nation was one hundred millions. Ten billions in wages would mean one hundred dollars for each man, woman and child. As the typical family is composed of parents, three children and one dependent, this would give \$600 as the average income of workmen's families, a sum verified by other available data. If these be the facts, a 50 per cent rise in wages would demand the payment of five billion dollars annually. Much would be returned in increased efficiency but not enough to meet this bill. A fair estimate would be that the deficit created would be about 40 per cent of the whole, or two billion dollars. To pay this, together with the assumption by the employers of industrial liabilities, would involve an increase of 15 per cent in the value of products above those of 1914. This would be the cost of providing a decent standard of life for workers other than those general changes demanded by the good of the whole nation.

The need of the farmer is primarily for a stability of agricultural prices. At present, farming is a gamble and the mental attitude of the farmer is one of extreme pessimism. This seriously reduces his effectiveness and prevents the increase of agricultural products to the degree demanded by public welfare. A second need is for protection against race degeneration in rural communities and a third is for enforced coöperative enterprises which will enable joint production to be carried on to an advantage. The isolated

self-sufficing farmer, however valuable in the past, is now a drag on every rural community. Coöperative farming is as necessary as large scale production in industry and would produce as valuable results.

To gain a stability for agricultural prices demands not a fixing of average price but of a point below which prices cannot fall. At this point goods must be taken off the market, stored or transformed into products capable of increased transportation, or freed from the danger of deterioration. This will be the public cost of stable farming but it will be more than met by the lower average price. I have excluded corn and oats from the action of this measure because their prices are sufficiently stable under present conditions. The price of land fitted for their production is also above the \$100 limit. The need of price fixing is especially apparent in the case of wheat and potatoes. All garden products would be likewise benefited. Germany has found a minimum price of potatoes extremely helpful.

The productivity of land increases as its price rises until the point of maximum productivity. I have assumed this point to be reached when land is valued at \$100 per acre. Higher land prices tend to emphasize net at the expense of gross product and to increase the evils of tenant farming. This evil should be met by taxing rented land.

I also suggest a zone tariff for transportation in the place of the mileage rate now enforced. Mileage rates make the cost to the consumer that of the most disadvantaged farm while the benefits of lower rates for nearer points do not go to the farmer but are absorbed in increased land values. A zone rate the same for all producers would thus lower consumers' costs, cause products to be produced at points of greatest advantage, and give stability to all producers.

With the solutions suggested for the improvement of the worker and the farmer the public is familiar and on the whole favorably disposed. If it can be shown that they are practical they would be eagerly adopted. But the changes involved in an efficient business program would meet with severe opposition. The doctrine of free competition has been thoroughly instilled into the public mind by ages of practice; the transformation to an epoch of industrial restriction will therefore not be an easy task. The fear

of monopoly is a menace which can be avoided only by a rigid system of state regulation. The experiments of the war epoch have, however, shown how this can be done and their success constitutes one of the great benefits of the war.

The assumed inability to fix reasonable prices either for goods or services has not proved so great as was assumed. Book-keeping has become a science and cost accounts should be kept by every large establishment. When some common system of accounting has been devised and enforced, sound estimates can be made as to each element of cost and of the relation of cost to profit. Reasonable prices and fair profits are then an easy task to determine. Sometime the transition from competition to regulation must be made. Why not make it now when its effects are so much needed to solve other problems? It is through the increase of industrial efficiency that the costs of progress must be met. Distributive schemes fail through the animosities they create. Increased production and mutual aid are the only solvents of the problems inherited from long ages of want, and made vivid by the antagonisms of race and class.

Government regulations of this sort leave the individual as he is with all the variety of motive and interest which men now exhibit. The scope of individual initiative and personal choice would be largely increased and made real to all classes. Were all the proposed improvements made, no one would note the change on the street except for the absence of poverty and the presence of cheer. The difference would show itself in the mechanism of industry and the coördination of effort. When men work they would work with each other and not at cross purposes. Industrial units would be on so large a scale that the individual would be no more conscious of them than that the world turns on its axis. It is bad, imperfect mechanisms so small and complicated as to demand individual attention which make us their slaves. Great mechanisms are the basis of personal freedom. They save time and energy for objects of greater personal moment. Friction can thus be removed and self-initiative encouraged without the repression which a close supervision of individual acts creates. It is the individual who should be free, not the great mechanisms of production.

CONCLUSION

The cost of the war may amount to thirty billion dollars to which a like sum may be added if a lack of foresight permits a world crisis to generate its destructive power. A full coöperation between worker, farmer and producer is needed to thwart this evil and to create the fund out of which the deficits of progress may be met. Mutual effort and the utilization of known devices would add from sixteen to twenty billions to the annual income of the nation. The cost of this would not be more than eight billions and might be much less. This would mean a 50 per cent increase in wages, a 5 per cent return on safe investment, \$100 an acre as the average price of farming land, stable prices for all agricultural products, a 10 per cent return on active capital, a sixty billion annual income and an increase of national wealth from two hundred to three hundred billion dollars. Such is the change measured in dollars. The improvement in health, longevity, education and efficiency are equally apparent. A world is in sight in which none are ignorant, few die before the age of sixty, where poverty is unknown and disease ceases to terrify. Shall we let old antagonisms and senseless stupidity keep us from a goal which mutual good will could readily attain?

NATIONAL BUDGET

New sources of national income

	<i>Millions</i>
Control of mineral products.	\$500
Increased use of tropical products.	500
The utilization of chemistry.	500
Improved market facilities.	500
Railroad economies.	500
Decrease in adverse balance of trade.	500
Water rights and water ways.	500
Office economy.	500
Administrative efficiency.	1,000
Food conservation.	1,000
Prevention of disease.	1,000
The standardization of products.	2,000
Joint mass production.	2,000
Stabilization of agricultural prices.	1,000
Elimination of sales costs.	1,000
Increased efficiency of labor.	3,000
Total.	\$16,000

ADDITIONAL NATIONAL COSTS

	<i>Millions</i>
Interest on debt.....	\$1,000
Pensions.....	1,000
Sinking fund.....	1,000
From rise of wages.....	2,000
Costs of industrial transformations.....	600
Industrial liability.....	500
Health supervision.....	500
Child culture.....	400
Vocational training.....	400
Community welfare.....	400
Research and experiment.....	100
Super-education.....	100
Total.....	\$8,000

FARM MAXIMS

1. The increase of production comes not from an enlarged acreage but from a better use of good land. A bad year for good farmers is a good year for bad farmers.

2. Any product which can be raised south of the frost line should be raised there.

3. Gross production is limited when the price of land rises above \$100 an acre.

4. The farming unit should not be less than that needed to employ two men at full time.

5. The dearer stock and tools are in the end the cheaper.

6. The home uses of food are more important than those of the market.

7. Farm prices should not be a gamble but a certainty. Stable prices are better than alternating high and low prices.

8. Local associations should control the occupancy of farms and enforce coöperative enterprise.

9. Every community needs defensive measures to protect it from race degeneration, and coercive measures to promote production.

10. Each agricultural unit whose industry conforms to public interest should be placed in a position to compete on the common market. For this end a zone tariff affords the best solution.

11. All staple food crops except corn and oats shall have a

guaranteed minimum price estimated at 80 per cent of the average price for the past ten years.

12. No importation of farm products shall be permitted where the price falls below the average of the past ten years.

13. Experiments of national import shall be made in the preservation of food products from season to season and when successful shall be operated on a sufficient scale to stabilize food prices.

14. Elevators, stock yards and other means of marketing products shall be made common property subject only to such fees as are needed for their maintenance.

15. Farm tools and improvements shall be exempted from taxation except for schools and roads. Nor shall dairy farms be taxed for more than 60 per cent of their value.

16. All rented land other than to members of the same family shall be subject to a tax of 10 per cent on the rent received.

LABOR MAXIMS

1. The working day shall be limited to eight hours, the week to forty-four hours and each year shall contain a two weeks' holiday with full pay.

2. The expense of removing the causes injuring laborers or reducing their vitality shall be regarded as legitimate costs to be borne by each industry.

3. All attained standards shall be regarded inviolate.

4. Laborers shall favor industrial improvements and share in their advantages equally with employers.

5. When labor is displaced by improvements, this labor shall be compensated for its loss out of the profit arising from the improvement. When this cannot be measured, the burden shall be accepted by the state and paid for out of the general surplus of society.

6. All health regulations affecting the workers shall be regarded as public charges if their causes lie beyond the control of specific industries.

7. Where the work of an industry incapacitates or reduces the efficiency of the worker before sixty, his support is a legitimate charge on this industry until that age is reached.

8. One thousand dollars shall be regarded as the minimum standard necessary to provide for the support of a family. Where

superior efficiency is demanded in any occupation, sufficient additional remuneration shall be given to evoke the needed skill.

9. Workers shall not demand the control of the industries in which they work but they must have the right of collective action and of collective decision. They are entitled to all the facts which bear on wages, costs, prices and on industrial effectiveness. When these facts are given, no publicity shall follow unless the management and the workers fail to agree as to the policies involved.

10. Workers shall control the conditions of membership in their unions, but these regulations shall conform to public interest and be subject to public revision.

11. The education of children shall continue until the completion of their eighteenth year before which age they shall be excluded from industry except as part-time apprentices subject to the rules of the union concerned and of the educational authorities.

12. Every industry shall supply continuation schools in which the worker may attain the maximum efficiency of his occupation.

13. Where women and men do the same work their pay shall be the same. If women are excluded from unsuitable occupations, corresponding occupations shall be reserved for them subject to such regulations as their health and public welfare demand.

14. All industrial occupations shall be conducted on the ground floor and each plant so isolated that the worker may have a home of his own. Industrial plants shall be at the perimeter and not in the center of each town. The zoning of cities for this end shall be enforced by public regulation.

15. No taxes shall be laid on the food of workers nor shall special taxes be placed on their clothing or on housing material.

16. Organized labor favors coöperation with associations striving to promote public welfare and stands ready to do their part to make this larger unification effective.

BUSINESS MAXIMS

1. Joint mass production shall be encouraged under such regulations as conserve public interest. To this end a national board of industrial control shall be formed with powers similar to the interstate commerce commission.

2. National boards shall also be constituted to control water privileges, forests, mineral resources, the standardization of products and the protection of investments.

3. The legitimate capitalization of these joint enterprises shall be their present physical valuation plus 20 per cent.

4. If the present capitalization exceeds this limit, one-half of the net profits shall be set aside to reduce liabilities or to increase the value of plants.

5. The return on capital thus invested shall be double that of secure investments. Any excess of this return shall be divided equally between the enterprise and the public.

6. On the boards for the control of joint enterprises both the workers and the public shall have representation.

7. In these joint enterprises injury to workers or a reduction in their efficiency shall be accepted as a burden to be met by an increased price of the goods produced. They shall not interfere with the organization of their employes nor refuse to treat with them in their collective capacity.

8. All new issues of stocks or bonds, all new corporations soliciting subscriptions, all public presentation of schemes of investment, and all attempts artificially to raise or lower prices, shall be under the national control.

9. No increase of prices shall be permitted without national consent.

10. Where the sale or purchase of commodities involves foreign commerce, joint boards of control may be established to expedite such transactions with the right to hold property, to own ships and to control business facilities in the regions where they trade. Such enterprises shall be allowed a double profit on all capital legitimately employed.

11. The unification of existing railroad systems shall be permitted when such combinations permit a better routing of goods or prevent a duplication of facilities. All gains from agreements to lower costs shall be used for betterments or to reduce liabilities. The resulting values shall not be made the basis of stock issues nor of stock dividends.

12. Where corporations have developed with complex underlying obligations a simplification shall be permitted into two classes, mortgage and stockholders. Underlying securities whose holders refuse to be partners in such simplification shall be taxed 50 per cent on the excess of their return above 4 per cent on the original cash investment.

13. Mineral products are declared to be mutual national possessions and subject to such restrictions as to extraction and sale as public interest demands. All royalties exceeding 10 per cent of the value of the product shall be taxed 80 per cent.

14. A board for the control of agricultural products shall be formed with power to regulate price and to stabilize production.

15. Retailers shall be permitted to enact protective regulations subject to the supervision of the national board of industrial control.

16. Joint experiments for the reduction of costs shall be encouraged in all fields of production. On capital thus employed, 100 per cent profit is permitted during the first twenty years of the use of product.

POSTSCRIPT

The program outlined above would suffice to meet our internal problems yet the same difficulties are encountered on a much larger scale in our international relations. Many nations are likely to be unable to meet their obligations. Even France is not free from the danger of bankruptcy. We may therefore be compelled to enter into foreign alliances to stem a world tide of disaster even if our home affairs are satisfactorily cared for.

Three policies are open to us. An international league of peace, an alliance with England and a policy of isolation. A league of peace has moral and political advantages but its influence on the economic situation would be limited. We can successfully continue a policy of isolation only by the addition to our territory of lands to the south. We have scarcely any land free from frost while tropical products are of increasing importance. With this modification, a policy of isolation could be economically successful. We are not yet dependent on world commerce for the needed industrial expansion.

There would however be many gains from an economic alliance with England to safeguard our world interests and to give our ideals and traditions a lasting supremacy. The control of the sea is now Anglo-American. If it were used for humanitarian ends not only could economic prosperity be given the whole world but much could be done to ensure political stability.

The key to world peace is in the control of the sea. Those who

control it also shape world ideals and make world traditions. Economic prosperity is thus the forerunner of world unity and this prosperity is now in Anglo-American hands.

It seems advisable therefore to complement internal economic solutions with that larger world solution for which the position and importance of our race have made us responsible. The maxims which follow would give an external security as great as that to be obtained by the internal policy above outlined.

ANGLO-AMERICAN MAXIMS

1. The English and American people are declared to be an inseparable coterminal unit with mutual rights and duties.

2. Our inherited institutions, ideals and traditions are declared to be the only basis of a new world order. No nation shall be treated as an equal which does not accept them in their entirety.

3. No binding treaty shall be made with other nations except by the knowledge and consent of both nations. Any existing treaty violating this provision shall be revoked.

4. The assent of the Irish race is indispensable to this unity. Their rights and sentiments shall receive equal consideration to that of other integral parts of the alliance.

5. America shall have a super-sovereignty over the American continent. America and Australia shall have a like sovereignty over the Pacific ocean and its islands.

6. No nation shall have the freedom of the sea for its products which subjects its exports to any excise tax unless the proceeds are used solely for health, sanitation or industrial improvement.

7. No nation shall be given the freedom of the seas for its products which oppresses any part of its subjects on account of religion, race or other prejudices. Nor shall they keep armies beyond the need of internal protection.

8. All the mineral resources of the world shall be subject to sea control if their shipment is necessary. Nor shall tropical advantages or tropical people be exploited by any one for selfish ends.

9. The control of every sea is essential to these ends. All acquired rights shall be maintained and every precaution taken to make this control effectual.

10. This control shall not be used for the material advantage of any part of the Anglo-American realm. Nor shall it be used

to collect debts in foreign countries nor to enforce laws. Subject to necessary restrictions the trade and commerce of the world shall be open to all on equal terms.

11. Adjunct states may be formed by either nation within its sphere of influence. Such states shall control their local affairs subject to such regulations and limitations as are needed to preserve the alliance and to extend its influence.

12. A special supervision may be exercised over states organizing themselves on an Anglo-American basis. For this end Asia Minor, Persia and China are declared to be under Anglo-American protection.

13. No interference in the affairs of independent nations is intended. They shall have the same right of self-initiated progress which the Anglo-American race claims for itself.

14. The control of infectious disease is declared to be essential to the success of this alliance. For this purpose a tax may be laid on ocean commerce.

15. International commerce may also be organized and mass production encouraged so that a net profit may be created to pay the debts of nations incapable of meeting them.

16. Other coördinate nations may be admitted to this alliance if they accept these principles and permit public opinion to be molded by the same moral forces which create Anglo-American sentiment.

The Readjustment of Industry in the United Kingdom

By C. DELISLE BURNS, M.A.¹

London, England

THE industrial problem during the transition from war to peace is only in part administrative. Especially in England, where the state has never entered into industrial life without hesitation, the problems of manufacture and commerce will probably continue to be dealt with by private enterprise. Even in the confusion which may result from the sudden end of a great war, the government official is not regarded as the best person to solve problems of industry; and therefore the activity of the central government is confined to supervision and regulation of industrial life. Our statement of the issues involved in the industrial transition is limited and defined by these facts, and we shall describe the problems and the solutions adopted from the point of view of administration and governmental policy and not from the point of view of commercial or financial interests.

GOVERNMENT PREPARATION FOR RECONSTRUCTION

Reconstruction has been recognized since early in 1916 to be one of the tasks of the Government which would necessarily follow the war. Under the Asquith Government of that date a Committee of the Cabinet was appointed in March, 1916 to consider the problems and to prepare a policy for the time which would immediately succeed the war. That Committee, with various sub-Committees, began the devising of a plan for demobilizing the army, discharging civil war-workers and other urgent after-war issues; but it also considered problems of permanent policy, such as housing, education and the rest.

At that time the great transformation of the engineering industry for the manufacture of munitions had not been completed, and the industrial problems of the future transition to peace appeared to be largely problems of the supply of labor. When the

¹ Mr. Burns is author of "Political Ideals," "The World of States," and "The Morality of Nations."—THE EDITOR.

Lloyd George Ministry took office at the end of 1916, the consideration of after-war problems was continued by the old sub-committees; until, in March, 1917, a Reconstruction Committee was appointed, consisting of persons of standing in social knowledge, and in industrial and political experience. This Reconstruction Committee was to advise the Government on after-war problems; and it continued to operate until August, 1917, when the Ministry of Reconstruction was created.² The old sub-committees continued to exist and new committees were appointed. The industrial problems had by that time become very complicated; and Dr. Addison, the first Minister of Reconstruction, who had lately been Minister of Munitions, was well aware of the difficulties which the immense production of munitions had created in the chemical and metal trades.

The investigation of the after-war industrial problems was considerably extended by the Ministry of Reconstruction. An Advisory Council to the Minister was appointed, which consisted of leading men and women, both on the labor side and on that of employers. The problems of Finance, Commerce, Transport, Raw Material Supply, and many others of a similar nature, were carefully considered; and a special committee was appointed to consider possible developments in the Engineering industry.

The policy of the Government, therefore, followed the same lines as had been adopted by the Asquith Government, in preparing a general scheme first for the transition problems and secondly for the more permanent problems of readjustment to peace conditions. There had been a Cabinet Committee of the heads of Executive Departments and afterwards an Advisory Committee of experts; and now there was a responsible Minister with a Department, and experts as advisors. The organization of the Department was based on the distinction between the different problems as far as they could be foreseen in 1917; and the method of work was still largely through the investigations undertaken or the advice given by Committees.³ Naturally, the Ministry was not

² New Ministries Act; 7 and 8, George V., ch. 44, of 21, viii, 1917. For the details of the work and organization of the Ministry of Reconstruction, see the *Annual Report*.

³ The following is a list of the chief Committees which deal with industry and commerce: Old sub-Committees—Agricultural Policy, Coal Conservation,

concerned with industrial and commercial readjustment only. Problems of social amelioration, housing, education and the machinery of government, were also dealt with, but here we shall be concerned only with that part of the work which was affected by and which affected industrial adjustment in war, and after war to peace conditions. The cost of the Ministry of Reconstruction was given in an official statement of June 17, 1918 in the House of Commons, in comparison with certain other costs; but it must be understood that the cost includes expenses of members of Committees:

<i>Department</i>	<i>Total Staff</i>	<i>Total Annual Cost</i>
Ministry of Munitions.....	16,809	£2,775,179
War Office.....	16,100	2,206,533
Ministry of Labour.....	5,763	756,268
Board of Trade.....	4,800	780,000
Ministry of Reconstruction	112	24,935

THE MINISTRY OF RECONSTRUCTION

The Ministry of Reconstruction formed, as it were, an outlook post before hostilities ceased. It had no executive powers and it was, therefore, dependent upon the older departments both for the knowledge which past experience had given them and for the carrying out of any measures which could be adopted while the war lasted. Most of the executive departments, however, were too much absorbed with the work involved in war organization to devote much time to the preparation of post-war policy; and in any case the problems of peace needed to be seen from some central point of view. Coördination of the inquiries preliminary to action by the executive departments was therefore necessary; and to this the Ministry of Reconstruction added the advice and experience of those who were outside government offices and were intimately acquainted with finance, commerce and industry.

When, at the end of October, 1918, it was clear that hostilities

Acquisition of Land, Demobilization of the Army, Relation of Employers and Employed, Civil War Workers, Demobilization. New Committees—Chemical Trades after the War, New Industries in Engineering, Supply of Raw Materials, Trade Combinations and Trusts, Currency and Exchange, Financial Facilities for Trade, Financial Risks in the holding of Stocks, Raw Material for Building, Financial Assistance for Housing.

would soon cease, the Minister of Reconstruction was able to present a definite scheme for demobilization and other transition measures to the Government; and immediately after the Armistice was declared, Dr. Addison made an announcement in the House of Commons of the chief points in the policy which the Government had decided to adopt;⁴ and various official notices in the Press were issued.

That is the history of preparations for solving the problems of the readjustment of industry. We may now review the problems themselves in greater detail and explain the machinery which was at the disposal of the Government for dealing with them. Obviously it was impossible to foresee all the difficulties which have arisen and many of those which will undoubtedly arise in the near future. It was clearly impossible, for example, to foresee the suddenness with which the war would end. But on the whole, the general situation, as we now know it, was foreseen and the preparations made have proved to be useful.

EFFECTS OF WAR

In order to understand the problem, however, it is necessary to review first the adjustment of industry to war conditions and then to describe the readjustment for the transition from war to peace; for industry of January 1919 was very different from industry of 1914, and it was the difference which made most of the difficulties. The industrial problem became gradually more complicated as the war grew longer. In the later months of 1914, it may have been possible to think of a mere restoration of the old situation as soon as the war ended. But by the middle of 1915, it became obvious that the proportionate strength of different industries was changing, that new developments were occurring in some industries and that it would be quite impossible, even if it were desirable, to go back to the situation of August, 1914. The markets of the world had changed, the old transport routes were closed or very much modified, the majority of the goods produced were different, and a great part of the available labor of the world was under arms. It was expected that the financial system would collapse, that the world would starve and

⁴ Hansard. Commot. November 13, 1918.

that the new situation could not last for more than three years. But an adjustment took place in the world at large and in the United Kingdom, until in 1918 the organization of life on a war basis seemed almost natural and great numbers had learned to take advantage of the changes which the new situation offered.

GOVERNMENT ACTION AFFECTING INDUSTRY

The changes in industry during the war may be distinguished into those which were due to Government action and those which were the consequences of the world situation. The latter began to operate in August, 1914, in regard to employment and this was the first obvious industrial problem which had to be dealt with. Shipping was dislocated, orders were cancelled, men left the works for service in the army and the general result was that works closed down and great numbers of men and women were unemployed. The general public appeared to be affected by the beginnings of panic in regard to foodstuffs and the common cry which was used to keep industry going was "Business as usual."

When the situation cleared somewhat, the cry was raised that we should take the opportunity to "Capture German trade"; and indeed it was obvious that the supply of the markets of the world was likely to be considerably modified by the naval situation. We need not, however, relate the victory of the industrial changes which immediately followed; for Government action in regard to industry soon became the most universal source of change.

The natural and non-administrative causes of industrial change were such as the diminished quantity of goods produced and the limited supply of transport. This began the general increase of prices which was speedily assisted by various methods of inflation. Hesitancy, uncertainty and a general ignorance of what the situation would be in the near future all caused industrial change; and none of these were directly due to governmental action. But social life is one system and it is perhaps too abstract to distinguish the natural from the administrative causes of industrial change. In any case we are here concerned only with the administrative Government action with regard to industry begun for the purpose of raising men for the army and increasing the supply of munitions. The first and ultimately the most important changes introduced had to do with "dilution" and Trade Union practices.

The immediate purpose was to increase the supply of labor for the metal and chemical trades and to make labor more "mobile." The increase of supply was to be obtained by the use, in engineering works chiefly, of women and unskilled men; and mobility was to be improved by removing the regulations by which the Trade Unions had hitherto preserved the interests of skilled men. The demand for soldiers and munition workers absorbed all unemployed, drew back into industry the older men who had retired, introduced boys and girls into industry before their normal time and, above all, caused a transfer from peace industries to war industries. This transfer was, naturally, due in part to other causes than Government action, as we have noted above; but the general result on employment may perhaps best be explained at this point. The following are approximate figures to show some of the changes which occurred:

Occupation	Men		Women	
	July, 1914	April, 1918	July, 1914	April, 1918
Building.....	920,000	450,000	7,000	27,000
Mines and Quarries.....	1,266,000	1,052,000	7,000	13,000
Metals.....	1,634,000	1,849,000	170,000	555,000
Chemicals.....	159,000	166,000	40,000	103,000
Textiles.....	625,000	425,000	863,000	844,000
Total Industries (including others).....	6,163,000	4,966,000	2,176,000	2,713,000
Agriculture.....	800,000	589,000	80,000	89,000
Transport.....	1,100,000	821,000	17,000	95,000
Total Occupations* (including others).....	10,606,000	8,210,000	3,276,000	4,808,000

* Shows an increase, excluding domestics, dressmakers, mercantile marine and a few others.

We may now look more closely into the nature of the Government action which partly effected these changes; and here the most prominent issue is that of the Government pledges in regard

to Trade Union practices. The customs and practices in regard to the amount of work to be done, the class of worker who was to operate a certain type of machine, and other such regulations enforced by the skilled Unions, restricted the output of war material. It has long been a tradition of employers that Trade Union customs and practices are restrictive; and output has long been the chief purpose to which employers of labor have devoted their minds. In the same sense, the shipowner usually regards regulations as to a load-line as restrictive; and he is more interested in the output of cargo than in the space for the crew. But all regulation can be regarded as restrictive from one point of view; and from the Trade Union point of view the restrictions were regulations aiming at reducing to order the chaos of the labor supply. The customs and practices were, therefore, believed to defend labor from exploitation and were to be supported on the same grounds as were the Factory Acts or the relevant parts of the Merchant Shipping Acts.

It was clear, however, that a fundamental difference in the *method* of regulation existed, in that Trade Union practices were enforced by the parties chiefly concerned and not by the State. The Government of the day accepted the idea that a larger output could most easily be obtained by the removal of all regulative restrictions on the use of labor; and the State led the way by withdrawing some of the prohibitions under the Factory Acts in regard to overtime, the labor of women and children and in regard to occupations hitherto classed as dangerous. Some of the reports of the factory inspectors indicate that employers often went further than was intended by the Home Office and paid no attention at all to the old regulations. But apart from the exaggerated devotion to output at all costs—to others (which is often held to be of the essence of good business management) there was a general feeling that the old preservation of health and life must be subordinated to the supreme national need. Industry was, therefore, considerably affected by the removal of the customary "inhibitions" and restrictions. The Home Office assisted in the negotiations leading up to various agreements between employers and employed in regard to pre-war customs. These agreements generally were to the effect that women might do work hitherto done by men; and this was agreed by Trade Unions in

the following among other trades—cotton, woollen, dyeing and bleaching, lace, wholesale clothing, gloves, boots and shoes, gold and silver, china, oil-seed, and baking. The terms of the agreements generally ran thus: "It is mutually agreed—that females may reasonably be employed upon certain operations hitherto ordinarily restricted to male labor—that this agreement is an emergency provision and shall have effect only during the continuance of the present war." It is clear, therefore, that so far as these "Home Office" agreements go, the parties do not depend upon any state action for the establishment or the abolition of substituted female labor. The effect, however, has been immense; and it cannot now be separated from the effect of changes in the munitions trades which were the direct results of Government action.

CHANGES IN TRADE UNION PRACTICES

Trade Union practices have been changed, united or abolished during the war in the munition trades as a result of: (1) the Treasury Agreements of March 19 and 25, 1915; (2) Pledges given by Mr. Lloyd George on June 23 and 28 and September 9, 1915, by Mr. Asquith on August 3, 1915, and by Mr. Montagu on August 15, 1915, each speaking for the Government; and (3) the Munitions Acts of 1915 and 1916. A preliminary agreement between the Engineering Employers Federation and many engineering Trades Unions is known as the Shells and Fuses Agreement of March 5, 1915; and this led the way to Government action in regard to engineering. The result was that women were substituted for men and unskilled for skilled men; processes were split up in order to be given to different types of workers; changes were made in methods of payment and hours of work; and the whole apprentice system was affected.

About 20,000 records of such changes are in the hands of some Trade Unions and of the Government and this hardly represents the actual number of changes made in the different engineering shops. But obviously the chief change has been in the substitution of female for male labor, or the "diluting" of skilled labor. Here, then, is an immense adjustment of industry in regard to labor, to which the Trade Unions concerned have agreed on the express and repeatedly emphasized condition that it is to last

only for the duration of the war. The readjustment to peace renders it necessary, therefore, to consider the whole question of Trade Union practices and particularly in the engineering industries.

Further changes during the war have been made through the Labor Department of the Ministry of Munitions. The mobility of labor from place to place was secured partly by the institution of War Munitions Volunteers and an attempt was made in the closing days of the war to regulate the supply of skilled men by a method which was unfortunately named an "embargo." But these do not constitute problems for the readjustment to peace since they are measures which had only ephemeral effects.

The Wages System was affected by the awards of the Committee on Production and by orders under the Munitions Act of 1917. In general it may be said that the change resulted in a form of compulsory arbitration during the war and the settlement of wage disputes by a Government Committee; further, the changes of rate were in the direction of raising the level of wages in most industrial occupations. The effect on the after-war problem is dealt with below; but here it may be said that (1) Government contracts made it easier to raise wages and (2) in some cases, as in Railways, the new rates of wages could not possibly be paid if the industry were to go back to its pre-war organization.

MATERIAL FOR INDUSTRY

In regard to material for industry, Government action increased the supply of steel, wood, leather and, latterly, foodstuffs. At the time when hostilities ceased material for munitions was controlled and distributed through the Ministry of Munitions, material for army clothing through the War Office Contracts Department and foodstuffs through the Ministry of Food. The control system may be reviewed under these heads.

After some preliminary action under the Defence of the Realm Acts, the Munitions of War Act of 1915 gave power to the Minister to take the whole output of any munitions factory or to take over and use such a factory. Under the same Act a special class of controlled establishments was arranged in which there was a limitation of profits to six-fifths of the pre-war standard. The whole of imported ores has been in the hands of the Ministry of

Munitions and the merchant, therefore, has been put aside during the war, in this matter as well as in regard to the contact between the maker of material and the user. Machinery and tools in engineering works have been rationed among the firms by the Ministry of Munitions; and the price given by the State has been based not on market conditions but on a "costings" system under which the firms were given what was deemed to be a "fair" profit. It will be understood, therefore, that there was considerable readjustment of those industries which supplied munitions of war; and even if on the termination of the war the engineering and chemical trades go back to their pre-war organization, the experience of the war and the experiments then made will not be forgotten. These experiments will probably continue to affect the industries in the future.

In regard to wool, the Government through the War Office Contracts Department purchased the whole of the Australian clip. This, with other special supplies, was used to provide army clothing for all the Allies and the residue was allocated for civilian use. The raw wool was actually owned by the British Government. The price was kept by purchase under large contracts lower than the general world-price and, therefore, the armies of the Allies were clothed more cheaply than they would otherwise have been. The manufacture of the woollen clothing, however, had also to be organized in order that the abnormal situation should not react unfavorably on the organization of the woollen industry. The industry is carried on chiefly in Yorkshire; it is highly organized there, both on the side of the employers and on that of the workers.

It was therefore found possible to set up, at Bradford, the Woollen Control Board consisting of eleven representatives of employers, eleven of Trade Unions and eleven of the State. This Control Board was attached to the War Office Contracts Department, but was an independent authority for the allocating of supplies of raw material to the different mills. And, in spite of the natural English opposition to Government interference, the Control Board appears to have proved itself satisfactory to those interested in the woollen industry. In its place at the cessation of hostilities a Wool Council was set up which is to carry on as long as necessary the supervision over the allocation of supplies

to the manufacturers. During the war about 93 per cent of the wool has been used for Government orders, and only 7 per cent has been left for civilian uses. This proportion will gradually be transformed as the armies are demobilized, but there has been no detailed announcement of the method by which the Government will put upon the market the wool of which it is still the owner.

The new Australian clip has already been purchased by the State; but it is uncertain whether the British clip will also be purchased and no one can yet foresee when free auctions of wool will again be possible. The policy of the Government is clearly to make as easy as possible the return to normal conditions of free private enterprise, without giving an undue advantage to any "interests" by abolishing at a stroke the war-time control.

In regard to leather, jute and flax the War Office Contracts Department have exercised a control of the same kind, but not so extensive. There have been large purchases of leather by the Government both in South and North America, for the manufacture of army boots. And leather, jute and flax have been rationed to the firms holding contracts for Government orders. The principle is in the main the same as that used in regard to wool; and it will be seen that the administrative action entirely depended upon the fact that the State was the purchaser and consumer of the finished articles. The operation of control in these cases, therefore, forms no precedent for the case of manufacture for private consumers.

Cotton, not being chiefly used for war purposes, was regulated not by the War Office but by the Board of Trade. A Cotton Control Board consisting of representatives of employers, of Trade Unionists and of the State regulated the distribution of supplies of raw cotton. In view of the shortage, only 60 per cent of the machinery was allowed to be used in each mill, except that more might be used on payment of a levy for a license. The money thus raised formed a fund for the supplementing of the wages of those whose work was diminished by the Order; and this has formed a basis for a possible future policy in regard to insurance by an industry against unemployment or under-employment.

CONTROL OF FOODS

Food and the raw material for foodstuffs are in a very unique position in regard to consumption for State Services and for private needs. Obviously, supplies of food for the armies of the Allies were as important as supplies of munitions. It was also necessary for the State that munition workers should have adequate food. But even in regard to civilian consumption, the State could not afford to be as disinterested as it might be, for example, with regard to the supply of lace or children's shoes. Although, therefore, the State Services were not the only nor even the chief users and consumers of foodstuffs, the State was compelled to take over in 1917 the whole control of the food supply. There were many changes of policy between the beginnings of panic in 1914 and the shortage and in maldistribution which led to the establishment of the Ministry of Food in 1916.⁶ Eventually the Food Controller issued Orders, enforced by about 1800 local committees which were appointed by the local authorities.

Under this system there has been governmental purchase in the world markets instead of private competition for imported supplies; there has been a costings system and examination of the books of firms, leading to Orders restricting prices and profits; and there has been control of flour mills and a reorganization of the whole distribution of foodstuffs. This has all been due to war shortage and war prices and may not affect readjustment problems; but it is obvious that the food supply trades will be for a long time affected by the results of control.

CONTROL OF TRANSPORTATION

Shipping had, latterly, at the end of the war, been under a requisition system; and all British ships were under control of a responsible Minister of Shipping. But it appears that no special problem of readjustment is likely to arise in the matter, since the disappearance of war dangers and war shortage may reduce policy to a mere removal of control.

Apart from special War-Time Ministries, the Board of Trade has exercised a considerable influence on industry through the control of railways and other land transport, petrol, coal, gas and electricity, cotton, timber, paper, tobacco and matches.

⁶New Ministries Act, Dec. 20, 1916.

The more important of these controls was obviously that affecting transport and power supply.

Considerable readjustment of industry occurred in regard to transport. Railways and canals were put under a unified control by the Railway Executive Committee, which was responsible to the Board of Trade; and there was a separate Executive Committee for the Irish railways. These Committees consisted of the managers of the chief railway Companies, who then organized on one plan the whole railway system. The receipts on the traffic of 1913 are guaranteed by the State to each Company. Passenger fares have been raised by 50 per cent at different dates; and the number of trains has been cut down. But immense quantities of troops and munitions have been carried without any detailed charge to the State.

COAL, EXPORTS AND IMPORTS

Coal-mining has been affected by the Coal Controller, under the Board of Trade. Action began by the attempt to restrict exports in May, 1915. Reorganization of coal distribution and the fixing of prices were then adopted and eventually the Board of Trade took possession of the South Wales mines in December, 1916, and of the rest in March, 1917, when the Controller was appointed. He regulated the production and distribution through the old management; and 95 per cent of profit in excess of the profits of the best two out of three years, or the best four out of six, before the war, were surrendered to the State. The result has been a raising of wages, and until the recruitment of miners in 1918 an increase of supply and an improvement in distribution. The Coal Mines Control Agreement (Confirmation) Act, 1918, continues the powers now exercised for six months after the war.

Trade has been affected also by the license of imports. The license has been a notice to the Customs authorities to allow the entry of goods, and although goods could be shipped they could not be delivered without a license. The Board of Trade and other Government Departments issued licenses for different articles; but here again readjustment to peace will mean little more than an abolition of war practices.

The Excess Profits Duty is another State measure of great importance to industry; but it is beside our point here to discuss it.

The problem for reconstruction is only whether the Duty has seriously diminished the supply of available capital for the necessary expenditure in meeting the new charges of the transition from war to peace.

The whole system of control within the United Kingdom is a part of the organization by which joint action was taken by the Allied Governments. And perhaps this inter-Ally control may eventually prove to be the greatest step forward which has been made during the war. Joint purchase by such bodies as the Wheat Executive, joint organization of distribution under the Food Council, are important experiments in the adjustment of industry and commerce through state action; but the description of the inter-Ally organization is outside our present purview. It is sufficient to say that the Inter-Allied Maritime Transport Council controlled the use of all ships owned or chartered by the Allied Governments. This Council was assisted by Programme Committees for the different commodities; and on these Committees agreement was arrived at as to the needs of the different countries of the Alliance. The Maritime Transport Council and the Food Council were the two supreme bodies for the organization of joint action; and to each was attached a permanent Secretariat which forms the link with the executive officers of the several Governments.

The whole of international trade and commerce had been affected by the Blockade system, the Statutory list, the withdrawal of ocean shipping and the lack of commodities due to war; but the inter-Ally organization was able to provide and increase the supply of munitions, food and raw material; and the results are not likely to be forgotten. Announcements have already been made of an Economic Council, and of arrangements for joint action between the Allies in view of the problems of supply in the early days of peace. But this is a matter of international or world politics; and we must confine our attention here to the United Kingdom.

Such are the chief measures which affected the adjustment of industry to war. The industrial situation on November 11, 1918 in Great Britain was different from that of August, 1914, chiefly in the following particulars:

SUMMARY OF THE SITUATION ON NOVEMBER 11, 1918

(a) There were new Departments actually trading or directing manufacture and trade, such as the Ministry of Munitions, the Ministry of Food and the Ministry of Shipping.

(b) There were Control systems affecting manufacture and trade.

(1) Under the War office, for wool, jute, flax and leather.

(2) Under the Board of Trade, for timber, petrol, matches, tobacco and notably for coal and railways.

(c) Wages were high and so also was the cost of living.

(d) Certain industries held much labor, notably metals and chemicals, while certain others, as cotton, building, etc., had comparatively few.

(e) There were about one million more women in industry.

(f) There was practically no unemployment, except in so far as the coal shortage was causing the factories to slacken production

The new situation may be viewed from two angles. We may note either the effects on industry or the effects on the State; but clearly it is too soon to make any complete conclusions as to effects which may only be apparent after the confusion of war is over. Industry and commerce have been affected perhaps chiefly by the obvious advantage of centralized organization. In many trades new Associations and Federations have been formed; and undoubtedly State-control has promoted the pre-war tendencies to Combinations and Trusts. Even more fundamental results may be observed, although perhaps their true nature may not be agreed upon by Economists and Political Theorists. It seems, however, that serious disbelief has arisen in the old attitude of Economists who "explained" the rates of wages, the profits or the price of goods by reference to large and high-sounding principles. It is now more than suspected that wages and prices are the results of what in vulgar terms may be called "a try on." The whole system is seen to be empirical. Wage-earners get what they will take, and the whole economic structure is seen to be based upon political or social traditions and that acquiescence and docility which Lord Bryce said long ago was the foundation of the State. As for the State, the effect of its contact with industrial life was not, at the end of the war, to increase the love of it among the

general body of citizens. At one time both employers and employed were united in sentiment against governmental action. Nevertheless, public opinion has supported State action directed against any persons or groups who might make private gain from the political situation, and against the use for private ends of commodities needed for public work. "Profiteering" is a word now established and people are less inclined than before to resent such regulation as the prohibition of the use of petrol for pleasure or of building for luxury. All these somewhat intangible effects of the war adjustment of social life and industry will undoubtedly make a considerable difference to State action in the future. We may now turn to the reconstruction policy. The measures taken to assist in the readjustment of industry to peace conditions may be summarized under the three heads of labor, material and finance. The labor situation depends largely upon the transfer of workers from war-work to peace production and upon the order and rate of demobilization of men from the forces. Arrangements had been made for both of these; and following on the declaration of the Armistice, a succession of announcements were made in Parliament and the Press.

READJUSTMENT OF LABOR

Civilians. The principle adopted with regard to civilian war-workers was that of gradual discharge. First, those who did not depend for their living on the work they were doing were asked to withdraw from munition factories or were given notice of dismissal. Then the break clauses in the contracts for ammunition and some other war-material were put into operation; and contractors began to discharge workers. Women and disabled men seemed to the general public to be sufferers under this plan; and for a time there were protests and wild suggestions that the manufacture of munitions should be continued until other work was obtainable by those likely to be discharged. The Government policy was, however, clearly inevitable. It was unwise to use material needed for peace products in the manufacture of useless shells and bombs; and, further, there was not enough storage space for more ammunition when none was being shot away at the front.

Industry, however, was not ready to take over the workers released from the manufacture of munitions. General unemploy-

ment was, therefore, to be feared; and in fact great numbers of those discharged could find no new work. Hence it was that the universal free Unemployment Benefit was established for all workers who come under the National Health Insurance Act of 1911. Before the war about 2,292,000 men and women were insured against unemployment under the contributory scheme. That scheme was extended to cover about 1,140,000 more men and women by the Munitions of War Act, 1917; but there were at the end of the war about 10,000,000 workers uninsured against unemployment, and there was clearly no time to establish the administration of a contributory scheme.

It was, therefore, decided that the State should offer free unemployment benefit to all workers for thirteen weeks during a period of six months after November 25. The rate, after some readjustment, was 30 shillings a week for men and 25 shillings for women, with 6 shillings a week for the first dependent child and 3 shillings a week for every other dependent child. This was obviously a very much higher rate than the old 7 shillings and 6 pence per week; but the cost of living was great, wages were high and unemployment was affecting even the higher paid workers.

* We need not, however, discuss here the effect on the workers. The reaction on industry is hardly yet known; but on the whole the policy has provided a "waiting time" during which machines can be refitted, prices can be readjusted to the new situation and peace production can begin. Unemployment Insurance is an administrative method used to ease the change over from war to peace. It is not essential perhaps in countries where industries have been less affected by war conditions than they have been in Great Britain; and it may be quite an inadequate method if the industries of a country have been too completely dislocated to revive of their own initiative. But in Great Britain it has been adopted as a partial solution of the transition problem in regard to labor.

The second problem of labor in regard to civilian war-workers is the problem of finding employments for them where they were actually wanted; for although many were unemployed, some employments were open. But the only machinery available for placing workers in employment was that of the Employment Exchanges. It was foreseen that the old system would be quite un-

able to bear the strain which would follow the war and therefore, (1) an Act was passed giving the Minister of Labor power to expand the premises and staff of the Exchanges, (2) special arrangements were made that the Army should release immediately all Employment Exchange officials and (3) a Controller General of Demobilization and Resettlement was appointed, under the Minister of Labor. The Department of the Controller General became responsible for the whole labor situation during the resettlement of workers in industry.

The Army. We may now turn to the demobilization of the forces since from our present point of view this also is a labor problem of the readjustment of industry. The Committee on the Demobilization of the Army began its work in the summer of 1916. It devised a plan on which the policy of the Government was eventually based in October, 1918. At first it was not clear whether demobilization should take place according to military units, age and length of service or the needs of industry; but the Committee decided that the Army must be demobilized in an order and in numbers dependent upon the industrial situation when the time came. An order of priority of occupations in view of public needs was therefore prepared. It was agreed that coal-miners and transport workers, for example, were to be demobilized before hairdressers or salesmen; and arrangements were therefore made to demobilize the men, in equal proportions from abroad and from the army at home, in accordance with their occupations. But before general demobilization could begin, clearly industry could not be readjusted unless men specially skilled to fit machines or specially trained as organizers and foremen were released from the Army. These men were called "pivotal" because the occupations of other workers turned upon their being in their places. Employers were, therefore, permitted to make lists of such men and to obtain their immediate release.

Unemployment. In view of possible unemployment among ex-soldiers, free Unemployment Benefit of the same kind as that applicable to civilians was offered to them. But the Unemployment Benefit was to date, not from November 25, but for six months from the day on which each soldier was demobilized. Furlough and war-service gratuities existed in addition; but these details hardly affect the industrial situation.

Wage Regulation. The wages problem left by the war was another preliminary problem of the transition. Wages in many occupations had risen considerably, and women's wages particularly were, in general, higher than they had been before the war. Prices also were high and it was agreed by many and believed by still more that the cost of living had risen much more than the rates of wages. In any case it was obvious that trouble would result if wages were lowered while prices remained the same. But it was clearly possible that, whereas during the war there was a shortage of labor, when munitions work ceased there might be a surplus of labor. Even if the situation were simply of this economic kind, the State would have been compelled to deal with it; but the additional problem existed that the State itself had maintained the higher rates of wages.

Awards of the Committee on Production and Orders under the Munitions Act had made it possible to enforce the payment of certain rates of wages for munitions work. These Awards and Orders had also affected the rates for work which was not munitions work. But if munitions work ceased, there would be no method of maintaining by law the existing wage rates; strikes would result from the effort to prevent a general fall in wages. Again the Munitions Act might cease to operate before any readjustment of wages had been agreed upon. For these reasons a Committee was appointed to consider what should be done in regard to wages under Awards and Orders; and the result was the speedy passing of the Wages (Temporary Regulation) Act of November 26, 1918.

By this Act it was made possible to enforce the payment of the wages generally prevailing on November 11, 1918, the day of the Armistice. A tribunal, of the same form as the Committee on Production, was established for judging the rates of wages and making any variations necessary. And it was made illegal for six months to vary the rate of wages except by agreement with the Trade Unions concerned.

It is not possible yet to pass judgment upon the results of the Wages Act. It was foreseen that, on the one hand, employers might be unable to pay the prevailing rates when Government contracts were withdrawn, more especially as during the war any increase of wages had been born by the Government in the price it

paid on its contracts. The new Act might, therefore, cause dismissals and unemployment.

But on the other hand it was believed by many that employers would be willing to pay well in order to have tranquility during the transition and that a high rate of wages would be more acceptable generally than uncertainty and fluctuations in the rates. Employers would be able to calculate their costs if they were certain of the rates of wages they would have to pay. And thus, in the readjustment of industry the State has had a considerable effect upon the situation in regard to wages.

A further preliminary problem of the transition, as may be imagined from what has been said above, was the restoration of Trade Union practices. It has been seen that the Government is pledged to restore these practices; and yet it is generally felt that industry has changed so much that they cannot be restored. It is said that the very machines and processes on which these practices have been based have disappeared. This, however, has been exaggerated. Nearly all the disappearance is due to the repetition work on shells and fuses; and the new machines and processes are not all permanent or useful for peace. But the problem of readjustment to peace does not lie there. The problem is not whether practices can be restored; it is whether the Trade Unions concerned shall or shall not regain the power with which they parted on receiving the Government's pledge and in the national interest. They once had the power to regulate the supply and distribution of labor; are they to regain it? If they are, they must be given the power to enforce the restoration of pre-war practices, as a basis for bartering. They must be able to restore even if they do not wish to do so in order that they shall have some say in the organization of labor in the new industrial situation. And undoubtedly the skilled Unions do not desire to put back the clock. They recognize the impossibility of a mere return to 1914; and they only desire to have power to substitute what they desire for that older situation. It became necessary, therefore, for the Government to prepare a Bill for the restoration of Trade Union practices which might be made a basis for an agreement between the employers and the workers concerned.

READJUSTMENT OF MATERIAL

In spite of all preparations for an orderly transference of workers from war occupations to peace industry, the crux of the situation was at one time the supply of material and machinery. In a highly industrialized society occupations depend upon much more subtle factors than in an agricultural or single society. The difficulties were foreseen. The Ministry of Munitions, as soon as hostilities ceased, began to issue permits to use material and tools hitherto controlled. The price of steel was kept under control in order that private firms might obtain enough at reasonable cost. But most of the metal supplies were at once freed.

The remaining problems were those of supply and allocation in the cases in which there was a shortage of material. As for supply, a Central Raw Materials Board, consisting of Cabinet Ministers, was appointed to deal, for the War Cabinet, with the securing of supplies. Through the Board of Trade and the Colonial Office, arrangements were made for the control by British interests of zinc concentrates and lead. A Government buyer of timber still continued to purchase abroad for the needs of peace, but the control of purchase of timber in England was removed.

As regards textiles, wool continued for the transition to be under the control we have already described and an arrangement was made for the export of jute from India only under license. Egyptian cotton was purchased by the Government, and the war arrangements with regard to American cotton are understood to be continued for the transition. Then, in regard to supply for the readjustment of industry from war to peace, the State acts as a purchaser in some cases of foreign material; and in some cases the State has made special arrangements for the control of supply to remain in British hands.

There remains the problem of distribution. Before hostilities ceased and while the position that would succeed was still obscure plans were made for carrying on in a modified form the control of raw material supply which had existed during the war. A Standing Council on Priority was established in connection with the Ministry of Reconstruction, which was to be the final authority under the Cabinet for the allocation of materials to the different industries. Each industry was to present a joint requisition to the Standing Council and the distribution of the material allocated

was to have been managed by the industries themselves, on the principle followed in regard to wool and cotton. Some valuable and important work was done by the Standing Council immediately upon the cessation of hostilities, but it soon became clear that tonnage and supplies were adequate for the operation of the normal trade machinery and State control and allocation were, therefore, soon discontinued.

The more permanent problems of readjustment are still unsolved. Committees have made recommendations on coal conservation and on electric power supply; but it is not a part of our present task to review suggestions. It appears that some action is being taken which may be preparatory to a large scheme of electric power supply for the whole of Great Britain; but the scheme is only at its initial stage. Experimental borings, with a view to developing mining resources, have begun near Lough Neagh in Ireland; but here again the action taken is hardly sufficient to warrant description in an account of industrial readjustment. The development of light railways in rural districts seems to be another of those schemes which may have a large future, but are at present indefinite.

The building trade was left by the war in a difficult position. There was a serious shortage of houses for the working classes, amounting to a need for about 500,000 houses in England, Wales and Scotland. Public and commercial buildings had not been erected during the war; and even repairs had been very inadequately done. But there was a smaller number of workers in the trade than in 1914; and there was a serious shortage of material—stone, brick and timber. For this reason the Ministry of Reconstruction set up the Central Building Industry Committee to deal with the reorganization and the needs of the building trades.

State assistance was recommended for the dye industry,⁷ and a Committee has been established to develop the scheme.⁸

The Engineering (New Industries) Committee has compiled a list of articles which were not made before the war in the United Kingdom or were made in insufficient quantity. This list and the Report of the Committee may be considered as examples of State assistance in the spreading of information; but no further State action in regard to engineering appears to be contemplated.

⁷ *Cd.* 9194.

⁸ See below Announcement of January 11, 1919.

Under the general heading of material we may consider the storage problems and the national factories. It was clear that industry and commerce, as soon as hostilities ceased, would need the storage space used during the war for war-material. The facilities for storage were essential to the movement of commercial products, and State property blocked the way. It became a part of reconstruction, therefore, to find space in warehouses and sheds. Ordnance and other stores were transferred from commercial warehouses to some of the largest national factories, notably those at Chilwell, Aintree and Georgetown; and the Port and Transit Committee have executive powers for disposing of storage space. In addition, when hostilities ceased, the State was owner of large quantities of stores and other property.

The Ministry of Reconstruction, therefore, carried on the Committee appointed to consider the problem of Government property, other than ships and factories. This led eventually to the establishment of an executive Surplus Government Property Disposal Board, which received all inventories and information collected by the Committee on the subject, and carried out the recommendation of the Committee by entering into negotiations and making contracts for the disposal of such property. Under this head come Army horses and mules, motor vehicles and agricultural stores; and the ultimate responsibility for all disposal of stores was given to the Ministry of Munitions which, it is presumed, will become a Ministry of Supply. The further problem remained as to the disposal of National Factories. The State, during the war, through the Ministry of Munitions, had expanded the engineering industry by building and equipping various factories. Some of these were hardly more than sheds, for shell-filling; others had the best and newest machinery for the making of such things as aeroplanes. Some were on ground owned by the State, others were closely connected with or even inside the grounds of private factories. Some were isolated; some were in vast groups, as at Gretna; and all were classed as National Factories.

This led to some misunderstanding among the public who happened to be interested and many schemes were suggested for the policy in regard to these factories. It might be possible, according to some, for the State to manage the factories for commercial production or for the supplies needed by the central

Government and the local Authorities. It might be possible to use some factories for research or for training or as educational establishments. On the other hand, strong influences were against the entry of the State into competition with private industry; and some factories had been built under contracts of transfer after the war. The details cannot be given here. But the whole position was received by the Ministry of Munitions and the factories were dealt with individually. The State has not adopted any policy of a general character which makes any striking departure from old practices; and therefore we may omit further description of the problem.

In regard to ships, the State owned about three hundred "Standard" ships of about 10,000 tons, at the cessation of hostilities. These were gradually disposed of to private owners by the Ministry of Shipping.

Agriculture may not be strictly an industry, but in the general readjustment of industrial life the occupations in rural districts were obviously important. They were investigated by a special Committee whose report has been published, and by a branch of the Ministry of Reconstruction; while, naturally, the Board of Agriculture continued its normal work. The result has been the Corn Production Act of 1917, fixing a guaranteed price for corn and establishing a Wages Board, with subordinate Local Boards, for fixing minimum wages in agriculture.

This will obviously result in a permanent change of the situation in rural districts. The Workers Union and the Agricultural Laborers Union are much stronger than they were; and if, as is expected, a certain number of ex-soldiers settle on the land, the position in rural districts may affect the whole of industrial life. It is suggested that the distribution of electrical power, under the new scheme elsewhere mentioned, would make alternative employments and small industries possible in country districts. But in general no action has been yet taken which we can class as readjustment.

Progress has been made with regard to forestry and an Interior Forestry authority has been established, which controls the expenditure of a grant of £100,000 for the training of experts and the making of surveys. A large scheme for the development of forestry in the United Kingdom is foreshadowed.

THE READJUSTMENT OF FINANCE

The great difficulty of readjustment in many cases of private firms was that either orders were not forthcoming or there was not enough money in hand to begin the current expenses of manufacture. The cotton trade, for example, was held up from an immediate return to its peace production by the uncertainty of markets in the East. And the public at large, as well as the retailers, were inclined to wait for prices to drop. On the other hand the large Government contracts during the war had accustomed many manufacturers to expect Government assistance, even of a financial kind; and the problem was much canvassed whether the State should assist financially in the re-starting of private industries.

The Committee of the Ministry of Reconstruction on financial problems dealt with very wide problems of exchange and currency and it was recommended that the effective restoration of the gold standard should take place as soon as possible.⁹ The effects of the Excess Profit Duty were also considered; but in all these matters, although investigation was made and close communication with the business world was maintained, no State action took place which can be regarded as having affected the readjustment of industry.

JOINT INDUSTRIAL COUNCILS

The action of which we have so far spoken has been in view of emergency problems of the transition. Unemployment Benefit and Resettlement are urgent post-war problems, but they are transitory; and the readjustment of industry, if it is to be at all effective, must be the result of more fundamental changes. The situation of 1914 could not be restored by any means; but the new situation would not be better, unless some effort were made. And this was the reason why the old Reconstruction Committee and the Ministry of Reconstruction devised what are now known as Industrial Councils. This has made a change in the general situation; and perhaps the other large change affecting industrial life is the creation of the new Department of Overseas Trade.

We omit, for our present purpose, changes of a non-administrative character and changes which have had a non-governmental

⁹ Cd. 9182 and Cd. 9227.

source such as the new federations and associations of employers and the new movement among the workers such as the Shop Rewards movement.

In the administrative sphere the readjustment of industry as regards permanent policy may be summarized under the heads of Industrial Councils and Overseas Trade. Industrial Councils have been already formed for the following industries: Baking, bedsteads, bobbin-making, chemicals, china clay, furniture-making, gold, silver and jewelry, hosiery, leather goods, watches, paint and varnish, pottery, rubber, saw milling, silk, vehicle building. In each of these industries representatives of employers and workers are consulting together on points of general interest to the industry. This may not be a revolution. It may come to nothing. But it may, on the other hand, be a beginning of a new organization of industrial life; and in any case it is becoming more possible to forestall disputes and to allow the workers a share in the control of working conditions.

In addition to the Industrial Councils already formed, there are many conferences and committees aiming at the formation of new Industrial Councils and even in those industries such as engineering and railways, in which there is no immediate prospect of a joint Council, the same movement is making itself felt. The formation of all joint Industrial Councils is voluntary and the Government does not use any pressure; but the duty of supervising and assisting, when required, is given to the Ministry of Labor. A section of that Ministry keeps in touch with the industries in view of the possibility of Joint Industrial Councils.

The Council of an industry is a national body; but generally there are also District Councils, subordinate to the National Council; and in a special relation to both stand Works Committees, which are part of the whole structure of the new organization. A valuable report on Works Committees has been published by the Ministry of Labor; and a parallel movement in the United States Army seems to have resulted in the formation of Committees in the works of the Bethlehem Steel Corporation. The idea is an old one; and it is not eventually connected with Joint Industrial Councils. But it forms a part of the permanent readjustment of industrial relations and with this the State is very much concerned; for on a Works Committee the workers gain control of

their working day, they may control dismissals and they have a very real training in self-government. Industrial autocracy is, therefore, passing; and its passing will strengthen political democracy.

The departmental history of the idea of Joint Industrial Councils is interesting, chiefly because it is part of the general preparation for post-war problems. A sub-Committee of the Reconstruction Committee continued under the Ministry of Reconstruction was appointed to consider the relations of employers and employed. Mr. Whitley, the Deputy Speaker of the House of Commons, was chairman; and the sub-Committee contained representative employers and workers. This body suggested the formation of Joint Industrial Councils to perform such functions as the following:

(i) The better utilization of the practical knowledge and experience of the workpeople.

(ii) Means for securing to the workpeople a greater share in and responsibility for the determination and observance of the conditions under which their work is carried on.

(iii) The settlement of the general principles governing the conditions of employment, including the methods of fixing, paying, and readjusting wages, having regard to the need for securing to the workpeople a share in the increased prosperity of the industry.

(iv) The establishment of regular methods of negotiation for issues arising between employers and workpeople, with a view both to the prevention of differences, and to their better adjustment when they appear.

(v) Means of ensuring to the workpeople the greatest possible security of earnings and employment, without undue restriction upon change of occupation or employer.

(vi) Methods of fixing and adjusting earnings, piecework prices, etc., and of dealing with the many difficulties which arise with regard to the method and amount of payment apart from the fixing of general standard rates, which are already covered by paragraph (iii).

(vii) Technical education and training.

(viii) Industrial research and the full utilization of its results.

(ix) The provision of facilities for the full consideration and utilization of inventions and improvement designed by workpeople, and for the adequate safeguarding of the rights of the designers of such improvements.

(x) Improvements of processes, machinery and organization and appropriate questions relating to management and the examination of industrial experiments, with special reference to coöperation in carrying new ideas into effect and full consideration of the workpeople's point of view in relation to them.

(xi) Proposed legislation affecting the industry.

The Government accepted the recommendations of the Whitley Committee, and gave to the Ministry of Labor the task of following up the policy suggested. Thus the Ministry of Reconstruction was able, while the war continued, to begin the reorganization of industry in view of post-war problems.

THE DEPARTMENT OF OVERSEAS TRADE.

The other change which may affect industry more permanently is the creation of the Department of Overseas Trade. This was the result of reports on the relation of our diplomatic and consular services abroad in connection with our Board of Trade organization at home.¹⁰ It is intended that the State, through the new department, shall more actively assist the foreign trade of the country. And this, although not a revolutionary change, has done something towards the readjustment of British industry to meet the needs of the after-war situation.

FUTURE RELATION OF GOVERNMENT TO INDUSTRY

These changes must be regarded simply as examples of what is being done for the readjustment of industry from war to peace, in so far as that readjustment is connected with administrative action. Obviously there are many movements occurring outside the purview of the Government which may make an even greater difference to future industry and commerce than any action of a political kind. And still more obviously there are many issues of a political kind still undecided, in regard to tariffs, essential industries, State manufacture, nationalization and State control. But we have omitted the discussion of suggestions and programs not yet accepted by the Government. Our subject has been largely historical. It is a record of accomplished fact; and the value of what has been done will be more easily estimated when the transition from war to peace has been accomplished.

But it seems clear that in the United Kingdom the preparation of policy is now regarded as essential to government and that it is now regarded as natural to prepare beforehand for future problems of peace as states have always prepared for war.¹¹ We have

¹⁰ *Cd.* 8815; 8715 and 8181, on the Reorganization of Commercial Intelligence Services.

¹¹ *Cf.* the valuable report on the Machinery of Government, *Cd.* 9230.

become much more conscious than before of the working of those economic forces on which depends the supply of our food and clothing; and we are much less willing than before to acquiesce in the method or want of method which we have inherited from our grandfathers.

It is difficult to make any adequate general statements as to the policy pursued either in the industrial adjustment to war conditions or in the readjustment to peace. The first and most striking point which can be made is that there was practically no preparation for the immense changes which the war caused in industry. It was inevitable that no preparation should have been made; for no one had imagined that the possible war of the future would be so far-reaching in its effects. But the result was that the adjustment of industry was irregular, often inconsistent in its parts, and above all—opportunistic.

Particularly in regard to the production of munitions, the action of the State depended rather upon separate solutions of difficulties as they arose than upon a consistent policy. But this does not imply adverse criticism of what was done; for it is impossible to conceive of a policy which could have been designed beforehand to meet the situation of 1916 and 1917. On the other hand, an attempt has been made to prepare industry for the readjustment to peace. We had the peace situation of 1914 as a definite starting-point for calculation and we could foresee some of the larger problems that would arise when hostilities ceased.

In the second place it may tentatively be suggested that State action in regard to the readjustment of industry to peace conditions follows the English precedent of the removal of the State from the industrial and commercial field. In a sense we are going back to August, 1914; that is to say, we are to depend on non-governmental organization for the supply of food, clothing and common services.

State socialism will not result from the war, at least in England. Indeed the experience of State action during the war has resulted in a very general suspicion of, and even hostility to officials. But opinion is the basis of government. The readjustment of industry will, therefore, mean a withdrawal of the State into a prescribed circle of activities; and on the other hand government

by business men will cease to be accepted, as the sphere of political organization becomes more distinct from that of commercial and financial activities.

Thirdly, although the State withdraws from the industrial field it will not, therefore, become less powerful. There is a general feeling that the State can do very much more than it has done in the past. The State may not manufacture or sell goods, but it may control much more completely than before the conditions under which goods are produced and distributed. In considering the readjustment of industry we must allow for this. The alteration to state socialism or state ownership is not necessarily "go as you please."

Nor is the State concerned only with punishing crimes or correcting abuses which have already arisen. Common opinion will certainly support supervision, prevention and direction on the part of the State; and, therefore, in the readjustment of industry there will be a forestalling of possible abuses by State action in regard to the length of the working-day, holidays, dangerous trades, workshop control, and even perhaps the limitation of profits and the control of trusts and combines. But all this is hypothetical. A tendency and nothing more at present exists in this regard. No definite actions can be cited. It is, however, obvious that among the soldiers as well as among the civil population there is a strong feeling that we should not go back to the industrial conditions of 1914.

Fourthly, the State has made considerable advances during the war in the organization of joint action with other states. Inter-allied controls may, indeed, disappear as soon as the normal operation of economic forces is restored; but what has been learned cannot altogether be lost. We omit here to discuss non-industrial or non-economic joint action; but in so far as inter-allied joint action has affected supply and distribution, it is clear that a new stage has been reached in political development. The traditional belief of theorists appears to have been that economic forces might be either state controlled or "free."

But quite obviously these two are not the only possibilities which exist. There might be a dangerous control by great interests, which are often operative outside and across the frontiers of any one state; and indeed a certain amount of such control

exists in normal times and has renewed growth in times of war. It is against this, and not against "freedom," that inter-state control is directed. During the war joint purchase, and an allocation of tonnage and supplies on joint agreement have been proved possible; and doubtless for the readjustment to peace, if any danger similar to those of war are encountered, the same kind of inter-state organization will be used. Indeed an adaptation of such organization to the needs of the transition has already been achieved.

Finally, the readjustment of industry to peace conditions is only a part of the whole problem which has been called the problem of reconstruction. Political progress does not necessarily take place only by slow accretions. There may be sudden imitations of social structure; and even habits and customs may, in certain crises, change suddenly.

A crisis appears now to be imminent. Violent changes have already occurred in certain countries; and undoubtedly the peoples of the world expect more than a mere restoration of the pre-war situation. But the policy which seems most likely to be progressive will allow for the fact that it is impossible to transform the whole basis of economic and social structure during a time of transition. The problems of the transition will have to be dealt with as ephemeral; and yet the method used should not prejudice the possibilities of larger and more radical measures of reform and reconstruction when we approach the task of organizing on a permanent basis the happiness of the peoples and the peace of the whole world.

Humanizing Industry

By IRVING FISHER

Yale University

THE war revealed great industrial discontent in our country, and our consequent weakness in time of stress and emergency. Lack of loyalty and lukewarmness of patriotism appeared more common among the industrial workers than elsewhere. The I. W. W. we regarded as distinctly disloyal. For their disloyalty some of us simply blamed them, or possibly put the blame upon German agents. The actual fact is, however, that the war only revealed, and Germany took advantage of, a dangerous weakness which already existed. Any propaganda among the I. W. W. simply indicated the cunning of Germany in finding the weak spot in our armor.

The fault of the I. W. W. is not primarily with its members, but with our existing social and industrial system. There is something radically wrong, of which the I. W. W. is a symptom. We must try to get an understanding of this, not stop at mere blame of its victims.

The extent of industrial unrest will be further discovered, and the discontent will be aggravated now with the sudden reversion to peace and the demobilizing of the army. The experience of Canada, for instance, has already shown that returned soldiers are not good workers because they are not satisfied with their old humdrum existence after their exciting adventures abroad. Ninety per cent of them, it has been asserted, are discontented.

Organized labor has the right to say here, as it is already saying in England: "We have done our bit and served our country. What is our country going to do for us?" And this is a pertinent question.

The German Government did everything for the workingman *before* the war. Therefore, when the war came the laborer felt that he owed his country something. He was willing, in return, to make sacrifices for his country. That was his attitude subconsciously, at least, even if not reasoned out. It is upon this subconscious sense of gratitude that patriotism and morale are

always, in the last analysis, dependent. Now the people of Germany understand the situation and a complete breakdown of morale is the result.

There are great changes necessary and imminent in bringing which, I believe, we should coöperate with the workingman. It will not be mere increase of wages and reduction of hours, though these reforms are the two things stressed in the demands of the labor unions. These needs have constituted the "labor problem" in the minds of most of us, but they will, I believe, largely take care of themselves,—at least, with the help of the labor unions.

There is a more fundamental reform upon which they are, to a great degree, dependent. Christ stated a great industrial truth when he said, "Man shall not live by bread alone."

WAGES DEPENDENT ON HEALTH

Of the many rights which the workman has heretofore only partially enjoyed, the greatest is the right to healthful conditions. Many do not recognize the importance of this right, but a few labor leaders, like Arthur Holder, are giving it more attention as a great factor in industrial success. Health is the workingman's capital, his only important asset. The man with money, the capitalist, does not need health as a means of making a living. If he falls ill, he can "live on his money." But if the laboring man loses his health, he loses the power to earn his living. His wages, which we consider so all-important, are dependent on his health.

Some people say that if his wages were raised, his health would be improved. This is doubtless true, but it is still truer that if his health were improved, his wages would be increased. To improve slightly an individual's health will not necessarily, it is true, nor always, increase that individual's wages; but if we increase, even slightly, the health, and thereby the working power of the nation as a whole, the general wage level will rise. In the last analysis wages depend on productive power, and the workingman's power to produce is dependent on his muscle and brain, i.e., his health.

A good illustration of this truth is to be found in the story of the hookworm disease in the South. The hookworm is called the germ of laziness. It produces anemia and saps energy. The

Rockefeller Hookworm Commission, by an expenditure of about 65 cents per capita, cured the disease by wholesale and made the Southern poor-whites once more into working citizens. With regained health, a worker could produce, at the least, enough to make every day a 100 per cent return on the 65 cents invested in his health!

Great returns are to be had from investments by employers in factory sanitation, lighting, and ventilation; and by the workingman in better and better selected food, housing, clothing, sports, amusements and books on health; and by the state in hospitals, sanatoria, dispensaries, health departments, health insurance, factory inspection, labor legislation, school hygiene, recreation, etc.

The workingman should have not only physical health but also mental health. Mental health depends on the satisfaction of certain fundamental instincts. If these major instincts are not fairly well satisfied, our lives will be failures, ending in the insane asylum or penitentiary. A human being whose instincts are balked becomes an enemy of society. This is the real reason for the I. W. W., as was emphasized by Prof. Carleton H. Parker, of the University of Washington, who, by personal contact and deep insight, probably knew more about that much discussed organization than any one else. The members of the I. W. W. were, he saw, not innately anti-social, but became so because they had individual initiative and a will of their own, and refused to conform, like the ordinary workman, to the Procrustean bed of industry today. They rebelled, like the small boys of a large city without playgrounds who break windows for excitement. When boys become so destructive, we give them, not a jail sentence, but a place to play; or at any rate the Juvenile Court recognizes that the delinquency is simply a miscarriage of the boys' legitimate instincts.

The I. W. W. workman is the naughty boy of industry. We have not given him the outlet which he must have. The very energy which breaks through and makes him destructive would, if enlisted for constructive work, have made him a more useful workman than his more docile and less energetic brother. It may be too late to reclaim him now, but we can at least prevent the making of more of his kind.

MAJOR INSTINCTS IN THE WORKMAN'S LIFE

I shall name seven major instincts which apparently must be satisfied to make a normal life. First, there is the instinct of self-preservation. The securing of a living wage must always be the first concern of a workingman. This has always been recognized as basic, and I need not therefore dilate upon it. Furthermore, self-preservation demands the maintenance of healthy working conditions, the prevention of over-fatigue and the provision of safety devices. No man can do his work well if he feels that it is fitting him only for the scrap heap. Finally, every employe should be assured of a steady job so long as he does his part. If he has to be "laid off" without any fault of his own, he should have due notice or a suitable dismissal wage. Fear of unemployment dissipates energy.

Secondly, there is the instinct of self-expression, or workmanship. Until modern industry contrives to satisfy this instinct in the ordinary workman, our labor problem will not be solved. I shall consider this below in greater detail.

Thirdly, there is the instinct of self-respect. Unless the workman is made to feel that "A man's a man, for a' that," he will be our enemy, will cherish a grievance, and will become anti-social.

The employer should, so far as possible, use praise for incentive rather than blame. If it is really necessary to call a man down, the rebuke need not be administered before his fellow-workers. The workman should be considered trustworthy until he has proved himself untrustworthy. Rivalry in production involves the satisfaction of the instinct of self-respect.

Fourthly, there is the instinct of loyalty. The universality of this instinct is strikingly illustrated in this war. Devotion to a cause, sacrifice for this cause, heroism if you like, have been shown by soldiers whose whole training has been one of monotonous industry. The instinct of loyalty should be satisfied in industry, as it is in the trenches. The employer often misses a great opportunity to be his workingmen's hero or honored general instead of their task master.

If the men can organize, a team spirit will develop. Collective bargaining and other forms of control of the industry by the men will forestall useless "knocking" and discontent and will develop loyalty instead. Mass activities, group singing, marching in a

parade, wearing a button or cheering a baseball team will develop and foster a united feeling.

Pride is an important constituent of loyalty. Workers have a right to expect that their plant is one worth being proud of. Fundamentally, loyalty is based on justice and mutual consideration. The employer who can best put himself in the place of his men best secures their loyalty. Extra work or overtime can, by loyal workmen, be "volunteered" with pleasure where "conscription" might arouse ill-feeling.

The great instinct of love, or of home-making, is a fifth instinct, and one vital for society. The homeless, migratory I. W. W. is an example of what occurs when life is deprived of its satisfaction. A man thinks of his own family as part of himself. His success means their happiness. Any action on the employer's part which affects family welfare immediately arouses resentment. The unrest caused by inability to enjoy family life or by bad instinctive life outside the plant is demoralizing. In a word, conditions of employment should, in every way, conduce to a happy family life.

The workingman's instinct of worship, if we may properly speak of such a faculty as a sixth instinct, hungers and thirsts for righteousness and often is not filled. If his daily work appeals to his whole nature and not merely to a portion of it, the task will be exalted to become really a part of his religion. No man should have to do work which is degrading or which will tend to crush idealism or warp the spirit of humanity and service.

Finally, the play impulse must be satisfied to produce mental health. The saying, "All work and no play makes Jack a dull boy," is true of the laboring man.

Some instincts are almost inevitably repressed, and, deprived of a wise outlet, are in danger of an unrestrained outburst. Play provides a safety valve. This play should not be frivolity, still less dissipation, but entertainment which will develop physical and mental health and a broadened outlook on life. A long workday makes proper play impossible, and is largely responsible for a man's resort to drink and other perversions of play.

Of the seven mentioned, only the instinct of self-preservation is even fairly well satisfied by the majority of workers. We thum too continually on this one string. Human nature is a harp of many strings. We must use the rest of the octave.

THE INSTINCT OF WORKMANSHIP

The instinct of workmanship has been all but crowded out. So gradual and subtle has been the change that we do not recognize it until we suddenly note the contrast. Like the art of making iridescent glass which, since the iridescence was due to imperfections in the process of glass making, was lost without the loss being realized as that process was gradually perfected, so the instinct of workmanship has been dropped out by the very perfection of modern industry. While attending so closely to the product, we have forgotten the psychology of the producer. While making one man perfect in one point and another in another point, we have sacrificed the satisfaction of both. The monotonous nature of the work, and the fact that the workman does not see his product, are the characteristics of modern industry which cripple the effort that instinct could put into the work, and which are responsible for the dissatisfaction and unrest. Get rid of them, and the main (though not the only) obstacle to industrial peace will be gone.

In modern industry, individuality is lost,—each man's work is thrown in a common pool. In former days, the cobbler made the pair of shoes and watched their progress, inquiring of the wearer, "How do they wear today?" The artist similarly has the joy of self-expression and creation in his picture.

Text-books of economics today make the statement that the motive for work is money-making, with the exception that artists and scientists work for the joy that their work gives them. There is no greater fallacy than to make this contrast. The workman has this same power, though latent, of enjoying self-expression in his work. Our usual acceptance of this fallacy shows how far we are off the track.

President Eliot of Harvard once spoke in Boston on the joy of work. The next week a labor leader in the same hall spoke with a scornful laugh of the "high brow's" reference to such "joy" and the crowd of workingmen present approvingly joined in his ridicule. This incident is pathetic evidence that joy of work is too often conspicuous by its absence. When I first became conscious of this fact, I was loath to publish my opinions. I was not sufficiently experienced in the field either as laborer or employer. I wanted to wait until I could see the ideas tested.

In the last year Miss Marot's book "The Creative Impulse in Industry," and Ordway Tead's on "The Instincts in Industry," have given expression to substantially these same conclusions. From still another angle Carleton H. Parker had reached similar views. The strongest evidence of their truth, however, is the experience of Robert B. Wolf, who has applied them in the practical management of a paper pulp factory.

What did Wolf do? He introduced into his mill a system of record-charts by which each individual workman could see what his contribution to the product was. Just as in baseball, we are interested in the score; and just as in school, students find grades an incentive, so the workmen were stimulated by having and making a record. The curves and charts which Wolf devised gave an opportunity for such expression as the artist or handicraftsman enjoys.

Before Wolf came to the mill, where he tried out these ideas, there used to be discontent. On his arrival as manager, there was a strike on, and pickets surrounding the yards. The mill owner told him to get that energy that was called out by the strike into the making of wood-pulp. In strikes, as in the trenches, there is the satisfaction of the instincts.

At first antagonistic to Wolf's innovations, the men soon saw the "new game" and in striving to excel in it, found a constructive outlet for the impulses that had previously gone into destructive channels. They no longer have to make trouble in order to have the feeling of "something doing." Discontent is gone. It has sometimes been necessary to change a man's work, but almost never to discharge a man for inefficiency. The tendency of letting men slip into dead-end jobs is overcome. Mentally and physically each man is suited to his job. Promotions and the development of all-round ability are encouraged. The work becomes educative, as the workman, watching his progress, masters the process until he can himself invent improvements in the technique.

I have sometimes illustrated the fact that employes need other than monetary inducements, in this way: Suppose President Wilson, as General Pershing's employer, had said to the General when he called him to the White House before sending him overseas:

"Now, Pershing, you are going to do a job for me. I want it well done. I know you will shirk if you have a chance. I therefore want to hitch up your interests with mine. Your pay will depend on your victories. I'll pay you a bonus for every German killed and another for every German taken prisoner. I'll pay you also for overtime beyond eight hours a day."

How would General Pershing reply to such "inducements," especially when put forward as though President Wilson assumed that he could not be expected to feel any other motive than the mercenary one? Would he not have replied:

"Here is my resignation, Mr. President. You have insulted me. What do you take me for? Of course a man must live, but money is the last thing I am thinking of now. I want to fight for my country, for you, for our ideals, for glory, and for the satisfaction of expressing whatever is in me of military genius."

An objector might say, "But Pershing is a general, an artist in his line, an exceptional man." Were not the common soldiers under him fighting with the same motives? And were they not the very same men who were formerly in shops working merely for pay? The army affords the most supreme illustration of men motivated by entirely different instincts than simply self-preservation or "making a living." Instincts which had been repressed or dormant up to this point in their lives were found far more powerful in these workmen soldiers than the instinct of making a living. When, as ex-soldiers, they come back to be workmen again they will unconsciously miss something and unless it is supplied them, there will be trouble. We must satisfy their higher instincts. The employer must see in the workman his brother man, of the same flesh and blood, with the same soul-hunger, needing the same soul-food to satisfy it.

The Labor Aspect of Reconstruction

By CLARENCE M. WOOLLEY
War Trade Board

FOR nearly two years the mind and muscle of America have been dedicated to war, but the dominant note rising above the clash of combat has been unselfishness. The desire to serve has been the usual, not the exceptional, attitude.

Our participation in the war represents an altruism rarely manifested by nations; however, this devotion to the well-being of others is not expended alone on far away objects but continues to be demonstrated in every phase of our social and industrial life. Out of this experience has arisen a finer sentiment of human relationship, a realization of the interests that are common to all mankind, and a sense of responsibility to each of those who make up the nation.

Men of business engrossed in their particular objects seldom find occasion to voice the idealism which they express in their work. In a true sense, the idealist is practical in that his vision permits him to make use of realities sooner than the man who pursues material advantage so closely that he dare not raise his eyes from the ground to catch a glimpse of a newer and better world. At no other time have we so much needed this spirit or desire to look out upon the distant horizon.

The crisp sentence uttered some months ago with respect to making the world safe for democracy has caught the popular ear and conquered the imagination of all men, and is the symbol of that force which will make for an advancing civilization. Consciously or unconsciously the world has revalued its commodities. At the same time it has revalued the human asset. In this process of appraisal our attention has been attracted more by material than by spiritual considerations. All right-thinking men would be pleased to see these new values permanently replace the old standards. It is well-nigh certain, however, that material valuations cannot be stabilized until the social valuations have been tangibly expressed in the policy of those who are called upon to direct the larger affairs of the country.

PRE-WAR PROGRESS FOR THE BETTERMENT OF WORKERS

In striving to improve present conditions we should not close our eyes to the progress already made. The decade preceding the war was rife with censure and criticism of large scale industrial operations, but during that period, unknown to the critic or to the public in general, the progress involved in this economic movement made for the betterment of the worker in the same degree that it gave security and advantage to investments. Information has not kept pace with reformation; not only had this process been associated with substantial increases in wages but there had been evolved by many of the larger corporations employment departments which contributed to the well-being and security of the men. The desire to accord just treatment and to protect them against the petty tyranny of the oldtime boss, transferred the employment process from the shop foreman to the trained and sympathetic specialist, who was the only authority empowered to discharge as well as to employ. This assured fair treatment when disputes arose. The employment official gave to each worker a hearing and before the final act of dismissal was consummated not only the facts but the equities involved had become the deciding factor. If it were found that a man had been assigned to work for which he was inept, he was offered an opportunity to make good in some other capacity.

This method gave to each worker the assurance of steady employment so long as he performed his task with reasonable skill and diligence. His term of service was not dependent upon the caprice of his immediate superior. It fostered in the mind of the worker a conviction of justice and security. Aside from the fundamental feature of hiring and discharging, the employment department contained medical, dental and first-aid subdivisions, to which the worker had ready access and where he was assured of sympathetic and helpful attention.

The welfare work in this connection was not confined to the activities described but reached out to the homes of the workers. If a man did not report for work in the morning, a messenger was promptly despatched to his home to ascertain the facts which prevented his appearance. If he were detained by illness, or if his wife or children were sick, the report was brought back to the employment department, and the medical director visited the

home to ascertain the need for assistance, which was promptly accorded. If the worker were overcome by sickness which required a change of surroundings, some of the larger industrial institutions have equipped themselves with sanitariums to which free access is offered for employes, and where they are gratuitously maintained.

At first glance it might be inferred that the worker would resent such attention, but experience has overwhelmingly proved that where there is no desire to be inquisitorial or dictatorial he appreciates such service, for with it go sympathy and a genuine desire to recognize the mutuality of interest inherent in the relations of employer and employe. While there is a return to the employer in such procedure, the advantage to the employe is relatively greater.

This system inculcates a better knowledge of hygiene and assists in developing a stronger and healthier people. It also decreases the amount of dependency which otherwise would fall upon state and municipal institutions. The practical test as to the wisdom of this plan has been made during the war period, in that those companies which follow approximately the course we have briefly outlined, found that their labor turnover was extremely moderate in the face of an enormous turnover where such measures were not adopted.

Then, too, some fifteen years ago, the process of creating a proprietary interest in the minds of the workers was carefully studied and definite plans for its realization were put into effect by many of the more advanced corporations of the country. The workers have been encouraged and assisted to acquire a stock interest in the employing company. In one company which has been called to our attention the employes own 30 per cent of the stock.

It is impossible, even if it were desirable, to go back to primitive methods of handwork, but it is desirable to retain the mental attitude which attended the workman who, in his own house, and working with his own tools, turned out a finished product from material purchased or produced by himself. The acquisition of shares of stock by the workman has been found to restore in some measure at least the mental attitude of the oldtime handworker. The foregoing plans were evolved gradually, just as all enduring steps of progress have been taken.

SHALL THE EXISTING SCALE OF WAGES BE MAINTAINED?

At this time no greater problem presents itself for solution than that of wages. We are face to face with the question of whether or not the existing scale of wages shall be maintained. The world has made a new appraisalment of its assets, and if I am not mistaken, the valuation of the individual will continue to be represented in larger terms. The revaluation of the individual has largely determined the new value of commodities.

Statistics will show to a nicety the value of our lands, our mines and our shops, but we would search long to find a rule for the appraisalment of the man power of the country. If the new valuation placed upon labor is maintained, the value of commodities must likewise remain on a higher level. The measure of inflation in commodity prices is not so great as it otherwise would seem.

Prior to the war, wages in this country as compared to those which were current in European countries were approximately 80 per cent to 100 per cent higher. The scale of wages now is approximately 50 per cent higher. If the United States could prosper and develop under the former condition of relative wages it would seem to be certain that it can likewise prosper under the present differential. This involves the assumption that the ingenuity and ability of American manufacturers can maintain the same superiority with respect to shop organization and mechanical methods to permit of an increased output per man, while it is certain that the supply of raw materials in the United States will continue to give this country an advantage over all others.

The largest corporation in the world has already announced a reduction in the price of its commodities with the assurance that it will not reduce wages. This, for the moment at least, reflects the attitude of large scale business throughout the country.

It is true that wages in certain special war work were abnormally inflated due to overtime, but such inflation can, without difficulty, be corrected by the abandonment of the overtime feature. Those industries which have operated on a conservative and permanent basis have on the average increased wages approximately 100 per cent, and it is this phase of the wage problem to which attention is now directed.

There never has been a time when the business men of the

United States were more favorably disposed towards a larger distribution of labor. Hence the sentiment is quite universal that the present level of wages should be maintained. Whether or not this can be accomplished depends upon a myriad of factors which it is beyond the purpose of this paper to discuss. In any event wages will not decline unless the desires and purposes of the business men of the country are defeated by conditions over which they have no control.

The whole world must increase production, earnings and savings in order to replace the dissipation of wealth incident to the war. One alternative is to spend less and to adopt a lower standard of living. The decisive element in the increased cost of living is not the greater price which must be paid for food, clothing, shelter and countless other things, but the higher standard of living which increased wages permit the worker to adopt. Consequently a reduction in wages means the lowering of the standard of living. That is why every well wisher for a better civilization desires the maintenance of the present scale of wages throughout the world, not only in the interest of those who receive such wages, but in the interest of society in general.

WORKING STANDARDS FOR PRESENT WAGE SCALE

It has been possible to pay wages to the rank and file of working men which permit them to enjoy many things not accessible to the worker of the old days, because of the great advance in mechanical inventions and the extension of scientific industrial management. In order further to increase the output per man and to permit the present scale of wages to be maintained, such scientific methods must be further developed along with additional investments in tools and machinery.

Capital must be provided to accomplish these progressive results and, therefore, care should be taken not unduly to curtail profits by taxation or by imposing other burdens which will render it impossible constantly to add to the productive equipment of the country.

In order to set a man at work he must be provided with shop equipment, power and proper housing conditions to permit him to use with greatest effect his physical strength and mental aptitude. The manufacturer must also safeguard the worker as to

health and surround him with those influences which will offer protection against mental and physical fatigue. Highly trained and sympathetic supervision must also be provided that a higher type of man may thereby be developed and his productive efficiency increased.

The eight-hour day has at last been sanctioned by England and by a large section of industrial America. The committee composed of statesmen, economists and manufacturers appointed by Parliament has declared, after a long and practical examination, that, under the auspices of the eight-hour day, a larger production per man for a period of twelve months can be effected. They testify that the aggregate of production will thereby be increased, while conserving the man power of the nation.

It has been ascertained that one hundred million dollars are required annually in England to find work for the natural increase in the population of that country. In this country a very much larger amount will be required for a similar purpose. It is important, therefore, to recognize the need to encourage the investment of capital in productive capacity. Obstructive and vexatious legislation is quite as injurious to labor as it is to capital. Legislation will encourage and not obstruct business if the attitude is affirmative rather than negative.

If capital invested in business cannot earn sufficient to pay reasonable dividends, with something in addition to cover the inevitable hazards of industry, it is obvious that money cannot be found to increase the shop capacity for greater production. Without such recognition to capital, it is a foregone conclusion that higher wages cannot permanently be maintained.

TAXATION AND INDUSTRIAL STABILITY

More than ever is it desirable to encourage, if not to compel by law, the setting aside of reserves to insure the integrity of inventories which are now threatened by fluctuations in prices to a greater extent than at any time within the memory of the present generation; this to warrant confidence in balance sheets for bankers and investors, and to give assurance and courage to industrial managers for the expansion of producing capacity. The profits of an industrial company are represented to a great extent by its inventory, not by cash in the bank. The cash item, as a

rule, represents but a small percentage when compared with the inventory item in the balance sheet. The failure of the bank to repay the cash deposit would prove a minor catastrophe compared to a sudden shrinkage in the value of the inventory, due to a decline in the market prices of the commodities included therein. The absence of a reserve to offset a shrinkage in the inventory values, at a time like this when economists predict and recommend a deflation of prices, constitutes a grave menace to the stability of our industrial situation.

Profits have been swollen by the arbitrary movement of prices upward, but practically all of these profits remaining over and above income and excess profits taxes are represented by inventories made up on the basis of increased commodity prices. It is obvious that the actual realization of such profits is dependent upon the sale of the merchandise at or above the values given in the inventories. Therefore, if, through the decline in prices, the inventory values representing these profits are depreciated, the manufacturer will suffer an unfair and irrevocable loss, inasmuch as he has contributed taxes to the government on the basis of anticipatory or paper profits.

The only protection against the disastrous effect of the deflation in prices lies in the practice of setting up a reserve to cover such a contingency. The present tax law discourages such conservative and necessary procedure. Congress should lend itself to a serious and solemn study of this question. The British Government permits and encourages such practice in the interest of a sound and stable post-war industrial condition. The French Government has not yet collected the excess profits taxes for the years 1916 and 1917 and has announced that such taxes will not become due and payable until after the war, this presumably in the interest of industrial stability. Shall the United States be less conservative and far-sighted in this respect?

The following illustration will enforce the point I am making:

<i>Inventory same tonnage or units</i>		
January 1, 1918	December 31, 1918	Abnormal profit due to price inflation
\$50,000 ²	\$100,000 ¹	\$50,000 ³
at actual cost	actual cost	

The \$50,000 abnormal profit was made in the process of selling at market prices those things which cost 50 per cent less—and as sales were made the stock, or inventory, was kept up to normal as regards units or tonnage, so that at the end of the year the actual cost thereof was \$100,000.¹

This in addition to normal trading profit = The latter profit subject to normal income tax.

The abnormal profit, \$50,000, subject to excess profit tax 80 per cent = \$40,000.⁴ Profit retained \$10,000.⁵

Now, if the deflation process reduces the market price to the level represented by the prices applied to the January 1 inventory² = the actual loss due to this arbitrary fluctuation would be \$50,000.

The arbitrary profit on the way up was \$50,000,³ \$40,000 of which was paid in taxes,⁴ hence the actual loss to the business would be \$50,000 less \$10,000⁵ = \$40,000, which sum, in all probability, would represent the increased line of credit extended by the bank, so that the capital of the business would be reduced below the pre-war status even if no profits were withdrawn as dividends or otherwise.

THE REMEDY

Deposit the 80 percent tax⁴ \$40,000, in federal reserve bank, ultimately to be paid the government if the inventory prices do not shrink, and if inventory prices do shrink, the payment to the government would be pro-rated in proportion thereto.

A careful examination of these questions always leads us back to the problem of wages. The prosperity and security of labor is involved to the same extent as capital in the proper adjustment of these vital matters. Inasmuch as the world of business is reconciled to and, in many cases, eager for the maintenance of the existing higher scale of wages, its realization is obviously dependent upon greater production and increased demand. If the economic adjustments can be made to warrant such expansion, the United States will enter upon an era of unprecedented business activity.

The war ridden countries of Europe are eager to purchase vast quantities of our raw materials and manufactured products. It

would seem necessary, therefore, at this juncture, for the United States to finance such purchases either through government loans or by private advances of capital. The government and people of the United States must face this problem with courage and understanding, for unless it is approached in an affirmative and sympathetic manner it will lessen the ability of those countries to pay interest on the loans already made—and necessarily to a large extent in commodities. We must buy if we would sell, and make new loans if we are to realize on those already made. Refusal so to do will menace not only the maintenance of the high scale of wages now current, but may delay for many years the reconstruction of business on a basis which will insure stable and far-reaching prosperity.

We have faith that the correct solution of these problems will be found because the people of the United States have not lowered their ideals, narrowed their vision, nor diminished their courage in this, the hour of victory.

The Civil Service in Post-War Readjustment

By HERBERT E. MORGAN

Of the United States Civil Service Commission

ANY American institution that normally employs in the neighborhood of a half-million workers, or approximately one in two hundred of our entire population, and the personnel of which was expanded to almost a million to meet war demands, must be considered in the general shaking-up and sorting-out process of dismembering the human machinery of war. Such an institution is the civil service of the United States.

There were considerable increases in the civil establishment during the period of war before the participation of the United States. After the American declaration, the great army of workers behind the fighting forces grew by tens of thousands until it numbered almost a million men and women. In the nineteen months of America's participation in the conflict the United States Civil Service Commission gave examinations under the civil-service law and rules to slightly less than a million persons and supplied to the service about 400,000 persons with tested qualifications. The number of civilian employes in the District of Columbia increased from about 35,000 to approximately 95,000. The mechanical forces at navy yards and naval stations increased from less than 21,000 to more than 100,000, and in government ordnance plants from 11,000 to about 40,000. Other branches were greatly augmented. Not only was it necessary to provide qualified men and women in numbers sufficient to meet the unprecedented calls for extra workers, but the places of thousands of men who shifted from the civil to the military service had to be filled as well.

With the war practically ended there is a partial reversal of processes. Two matters which now have the attention of the government are the replacement in either government or private employ of civilian workers who are dismissed because of necessary reductions, and the reinstatement in the civil service of men who left that branch of the government to meet the Hun on the field of battle.

At the time this is being written some reductions in the personnel of the civil service have already been made. The heavy reductions are yet to come, but they will extend over a period of many months. Not all of the "war workers" will be dismissed, however. While it stands to reason that the government cannot employ indefinitely the maximum war force, it is equally certain that never again can its normal business be conducted with the pre-war equipment. A return to the conditions that existed two years ago is utterly impossible. There are indications that a still more extensive naval construction program will be authorized; the regular army will be a larger institution than before the war, at least for some time to come, and a considerable part of the military establishment possibly will be needed to assist in policing Central Europe, in enforcing peace terms, and in the rehabilitation of devastated portions of Belgium and France; increased government ownership, or at least control of public utilities is also among the possibilities; the huge national debt necessitates the collection of additional revenue from many and varied sources; the war may leave us with a merchant marine worthy of the name, something that a thirty years' fight for subsidy failed to accomplish; our foreign trade will be increased; industries must absorb the greater part of the millions of men who made up our fighting forces; soldiers and sailors who, as a result of wounds received in the conflict, are incapable of returning to their former occupations, must be reëducated so as to fit them again to be wage-earners; the government has gone into new lines of work, such as insurance for soldiers and sailors. Each of these things will make work for the civil establishment. In the aggregate they will keep thousands of employes busy.

As soon as the armistice was signed it became evident that, unless prompt measures were adopted to prevent it, the wasteful operation of dismissed employes leaving on trains that passed others bringing in new appointees would develop; for, while reductions in some parts of the service could be regarded as a corollary of the cessation of hostilities, it was certain that some offices, such as the Bureau of War Risk Insurance, the Bureau of Internal Revenue, and the Office of the Adjutant-General of the Army, would be confronted by after-war tasks too heavy for the forces already employed. The obvious thing to do to forestall

such an anomalous situation was to make an arrangement whereby employes dismissed from offices in which they were not needed could be used in offices in which they were needed. Existing law did not permit the transfer of employes from one department to another if they had served less than three years; and in order to meet the situation the President issued, on November 29, 1918, on the recommendation of the Civil Service Commission, an Executive order which provides that the names of persons in the competitive classified service with unrestricted status who were appointed prior to the date of the order, who have served less than three years, who are separated from the service because of reduction of force, and who are recommended for further employment by the government because of demonstrated efficiency in the offices from which they are separated, will, upon request, be entered by the Civil Service Commission upon appropriate eligible registers for reappointment, eligibility thereon to continue for one year from the date of separation.

Reemployment registers established under the terms of the Executive order have been in a constant state of exhaustion, the eligibles having been certified and appointed as soon as they were available. There has been a net reduction in the personnel of some thousands since the signing of the armistice. In practically all cases, excepting employes of ordnance plants of the army, those who have left the government service and returned to their homes have done so because they did not wish to remain. Large numbers of persons entered the civil service during the period of war for patriotic reasons and at some personal sacrifice, and many of these have felt that they were justified in returning to their homes and again taking up their normal duties.

It is expected that, when the reductions in the civil service become heavier, there will be a surplus of eligibles on the reemployment registers. With a feeling that discharged war workers should have the assistance of the government in obtaining employment, as well as with consideration for the larger economic aspects involved, the Civil Service Commission is in communication with the Department of Labor with a view to making arrangements in advance for the replacement in private employ of surplus eligibles on reemployment registers when such surplus shall exist. Also, the commission recommended to the chairmen of the Senate

and House committees on the census that provision be made in legislation authorizing the fourteenth decennial census that eligibles on reemployment registers established under the Executive order of November 29, 1918, shall be used, so far as is practicable, for filling positions in connection with the census. The census bill, which has been reported from conference, contains such a provision.

Anticipating the time when men who left the classified civil service to enter the war would be mustered out, and, therefore, seeking employment, the Civil Service Commission recommended to the President that provision be made for the reinstatement in the civil service of such men. Accordingly, the President issued, on July 18, 1918, the following Executive order:

A person leaving the classified civil service to engage in the military or naval service of the government during the present war with Germany and who has been honorably discharged may be reinstated in the civil service at any time within five years after his discharge, provided that at the time of reinstatement he has the required fitness to perform the duties of the position to which reinstatement is sought.

Under the reinstatement rule which applies to persons other than those who come within the terms of the Executive order quoted, a person who separates from the classified civil service without delinquency or misconduct may be reinstated *in the department from which he separated* upon the request of such department made within one year of the date of separation. Under the terms of the Executive order applying to soldiers and sailors in the present war, a person who comes within the terms of the order may be reinstated *anywhere in the classified service* within five years after his honorable discharge from the military or naval service, provided that at the time of reinstatement he is fitted for the work to be performed.

The civil-service law and rules do not give to the Civil Service Commission any power of appointment or removal; that power is left where it was prior to such law, namely, in the President and the heads of the departments. Therefore, the commission is not authorized to oust present incumbents of civil positions to make room for discharged soldiers and sailors who are eligible for reinstatement; the most that the commission can do is to bring their desire for reemployment in the government service to the atten-

tion of appointing officers—that is, heads of departments and independent offices. The action taken by the commission with this end in view is shown in the minutes of its proceedings for January 9, 1919, as follows:

2. REINSTATEMENTS UNDER EXECUTIVE ORDER OF JULY 18, 1918, OF MEN WHO ENTERED THE MILITARY OR NAVAL SERVICE.

The following outline of action to be followed with reference to reinstatements under the Executive order of July 18, 1918, is approved. The order provides for reinstatement in the civil service at any time within five years after discharge from the military or naval service.

Public announcement will be made that men who are eligible for reinstatement under the Executive order of July 18, 1918, may apply direct to the office or establishment from which they entered the military or naval service if they desire reinstatement there, or to the proper district secretary if they desire employment in some branch of the field service, or direct to the commission if they desire reinstatement to positions filled from the commission's registers at Washington.

General authority will be given to boards at various government establishments, such as navy yards, arsenals, engineer districts, etc., to reinstate men who meet the requirements in positions for which the boards maintain registers. District secretaries will maintain lists of persons eligible for reinstatement who desire reinstatement in positions for which the district secretary maintains an eligible register, and the commission will likewise maintain lists for positions filled from the commission's registers. The attention of appointing officers will be called to these lists of persons eligible for reinstatement.

In determining qualifications, the physical condition shown upon a man's discharge from the military or naval service will be accepted, unless there is reason to doubt that his present condition is the same as when discharged, when further physical examination may be required.

Where physical condition is such as seems to render the man ineligible for reinstatement, the case, with the man's previous record, will be reported through the commission to the vocational board with a view to the applicant's possible rehabilitation.

It has not been the practice of the Civil Service Commission to maintain lists of persons eligible for reinstatement under the usual reinstatement rule. Persons eligible for reinstatement under the rule and who desire it are required to make application for reinstatement to the office from which they separated, and upon the request of such office the commission issues a certificate authorizing the reinstatement, if it is permissible under the rules. It will be noted, however, that in the case of discharged soldiers and sailors who are eligible for reinstatement under the Executive order of July 18, 1918, the commission plans to go further and will

do everything within its authority to assist them to find new positions in the civil service.

The preference in *original* appointment to civil positions which the present law allows to discharged soldiers and sailors is specified in section 1754 of the Revised Statutes, which provides that persons honorably discharged from the military or naval service *by reason of disability resulting from wounds or sickness incurred in the line of duty* shall be preferred for appointments to the civil offices, provided they are found to possess the business capacity necessary for the proper discharge of the duties of such offices. A person who has been allowed preference under the statute has the following advantages: (a) He is released from all age limitations; (b) he has to attain an average percentage of only 65 to be eligible, while for all others the average percentage required is 70; (c) having attained an average percentage of 65, his name is placed on the register above, and is certified before, those of persons who have not been allowed preference; and (d) he is released from the law and rules relating to the apportionment of appointments. (Under the law, positions in the government offices at Washington, D. C., are apportioned among the several states and territories on the basis of population, as nearly as the conditions of a good administration will warrant. Positions outside of Washington are not so apportioned.)

Persons entitled to preference under the statute are not released from any requirement as to physical condition, or from any other requirement of the examination for which application is made, except those specifically set forth in the preceding paragraph. The civil-service regulations as now framed, specifying certain physical defects which will debar from all examinations and other physical defects which will debar from certain examinations, are based upon the requirements of the service as established by the several departmental chiefs.

Legislative provisions are now under consideration by Congress with a view to determining what preference, including release from physical requirements, may be allowed to discharged soldiers and sailors. Where the bars applying to the physically disabled are let down in favor of an applicant with military or naval service, it is contemplated, in drafts which are being discussed, that the Civil Service Commission shall confer with the Federal Board for

Vocational Education to determine whether or not the man has reached a state of rehabilitation which will enable him to render effective service.

Not only are men in the military and naval services who are eligible for reinstatement under the Executive order of July 18, 1918, interested in opportunities for employment in the civil service, but large numbers of soldiers and sailors who have never been employed in the civil service and who are soon to be discharged may desire to know what opportunity the civil service offers for employment. With this in view the Civil Service Commission communicated with the Secretary of War and the Secretary of the Navy on December 17, 1918, requesting authority to appoint representatives of the commission at all establishments of the army and the navy in the United States, where service men are or will be assembled in considerable numbers, in order that soldiers and sailors soon to be discharged may readily obtain information concerning opportunities for employment in the civil service. The necessary authority for the appointment of these representatives was issued by the Secretary of the Navy on January 2 and by the Secretary of War on January 4.

At the time this is being written, forty representatives of the Civil Service Commission are in the field visiting the various establishments and making nominations to the commission for the appointment of representatives for the purpose stated. Many have already been appointed and the full organization is rapidly nearing completion. Pending the appointment of the special representatives, the commission brings opportunities for employment in the civil service to the attention of men at the military and naval establishments through permanent local boards of civil-service examiners near such establishments. The commission is entrusting the work of representation at military and naval establishments to welfare workers who are already on the ground. Keen interest in the project is being shown by these welfare workers as well as by the commanding officers and their subordinates and by the men in whose behalf the work is being done.

Besides making it easy for men at military and naval establishments to obtain information concerning present opportunities, the commission is instructing the men through its representatives in the manner of making use of the civil-service organization after

they return to their homes. This organization consists of approximately 3,000 local boards of examiners, made up exclusively of federal employes, in every part of the country, and reporting to district secretaries in twelve civil-service districts, all under the supervision and direction of the commission at Washington.

The local boards of examiners have offices in all cities that have house-to-house delivery of mail, and in some smaller cities that do not have such delivery. All local boards of examiners are supplied currently with announcements of examinations and are fully informed concerning civil-service matters generally. Discharged soldiers and sailors are instructed to keep in touch with local boards of examiners in their respective communities in order that they may be currently advised as to opportunities for employment. Those who live in communities in which the Civil Service Commission is not represented are instructed to communicate directly with the commission at Washington or with the nearest district secretary, whose address is furnished. In a normal year there are from forty to fifty thousand appointments in the federal civil service, embracing every class of occupation from mere unskilled labor to the highest grades of technical, professional and scientific positions.

Discharged soldiers and sailors, as well as all other citizens, are encouraged to make full use of this country-wide organization. It has met the relatively moderate demands of peace and has stood the acid test of war. It saved the government millions of dollars and much precious time in the feverish haste of preparing for war by supplying when needed thousands upon thousands of men and women who had been tested by examination and found qualified to perform work of certain kinds for which they were certified as eligible.

The operation of the civil-service system as a recruiting agency is illustrated by the methods employed to meet the changed conditions brought about by the war. During the war period, for the first time, the War and Navy Departments delegated to the Civil Service Commission authority actually to employ labor in addition to the duty imposed by law of testing applicants and certifying eligibles. The system adopted for the navy-yard service furnishes the best example.

The usual procedure in filling vacancies in the mechanical forces

at navy yards and naval stations is to receive applications at the several yards and stations for the classes of work in which there is likely to be need for additional men. Under this method the applications are received and the ratings made by the local boards of civil service examiners at the yards and stations. These local boards, with reference to the administration of the civil-service law, are under the direct and sole control of the Civil Service Commission at Washington.

When it became certain, on account of the international situation, that a greatly augmented force of civil employes at naval establishments was necessary, it also became evident, owing to industrial conditions prevailing, that the customary means of recruiting the navy-yard service would fail to meet the needs in certain trades, especially those connected with shipbuilding. It was plain that agencies in addition to the local labor boards must be employed, if the tremendously increased volume of naval work was to be kept from lagging.

At once the Civil Service Commission made an arrangement with the Navy Department to instruct the responsible officers at navy yards and naval stations to make daily report to the department by telegraph of their respective urgent needs, that is, the needs which could not be met through local filing of applications. The telegraphic reports from the several sources were collected in the Navy Department and transmitted daily to the Civil Service Commission.

The commission, in turn, each week, or more frequently when necessary, mailed a compilation of these specified needs to each of its 3,000 district and local boards. All of these representatives were instructed to use every proper effort to locate men with the qualifications desired who were willing and able to accept government employment. The district and local boards disseminated the information by sending notices to local newspapers, by enlisting the aid of local trade-unions, by keeping in touch with offices of the United States Employment Service of the Department of Labor, and by directly approaching individuals when there was opportunity for personal interview. Care was exercised to avoid undue interference with employes of private plants. The American Federation of Labor also rendered assistance of the greatest value in this work of recruiting skilled labor. During

the nineteen months of America's participation in the war, as a result of these special efforts, the mechanical forces at navy yards and naval stations were increased by more than 80,000 men.

In all cases of urgent need, when men could be found who were said to possess the desired qualifications and who were in a position to accept government employment, the Civil Service Commission arranged for one of its recruiting agents in the field to call upon each such man, receive his application showing his training and experience, look up his references, and give him a rating on the spot. If he was found eligible, the recruiting agent purchased his railroad ticket and shipped the man immediately to a naval establishment which was in need of his services, the government paying for the expense of transportation if the man was willing to sign a contract to work for six months. When practicable, available men were assembled in groups at convenient places for testing and shipment.

Methods similar to those employed in the case of the navy-yard service, varied to fit the peculiar conditions, were applied to recruiting for other branches and positions.

It is probably not generally understood that in many of the examinations given by the Civil Service Commission, the competitors are not required to assemble in an examination room for a written examination, but are graded upon their training and experience and where necessary, upon their physical condition. These so-called non-assembled examinations are given for two general classes of positions, viz: (1) Mechanical trades and similar positions, and (2) high-grade technical, professional and scientific positions, and administrative positions which cannot adequately be filled by promotion and for which the government requires men or women whose fitness is demonstrated in a record of successful experience. In such examinations competitors are rated upon the sworn statements in their applications and upon corroborative evidence adduced by the commission.

In his annual report issued in December, 1918, the Secretary of the Navy paid the following tribute to the war recruiting efforts of the Civil Service Commission:

Under the law, all navy-yard workmen must be recruited through the civil service, and the department desires to express its gratification and appreciation of the manner in which the Civil Service Commission met the emergency and

by the creation of almost a new organization and the fearless cutting of all needless red tape has done all that was humanly possible to meet the navy's demands in the shortest practical time.

In a statement recently sent out from the naval aircraft factory at Philadelphia, the following appeared:

On October 1, 1917, the first mechanic was hired at the naval aircraft factory the only government-owned industry of its kind in the United States. On November 1, 1918, there were 3,642 men employed in building flying boats for the navy. . . . Civil service rules, at first looked upon as a handicap, had to be dealt with and naval regulations were to be taken into consideration at every step. . . . Testimony of the generally satisfactory caliber of the employees secured under civil service is found in the fact that it was necessary to hire a total of only 6,035 persons to provide for the growth of force and for replacement. In private industry it is often necessary to hire eight to ten persons before a satisfactory employee is secured. Further testimony of the generally satisfactory caliber of the working force recruited under civil service is found in the fact that only 139 persons have been discharged for cause since the start of the factory.

This machinery of the civil service system, smoothed in the running by long use in peace and in war, is ever at the service of those who seek employment. It must be regarded as an important factor in plans of labor readjustment. Notwithstanding the abnormal expansion to meet war needs, and consequent reductions now, vacancies which must be filled are constantly occurring in the vast civilian force. Even at this time examinations of more than one hundred different kinds are open. Specialists are in greatest demand but there is frequent opportunity for the employment of those who have no training in a specialty. The reemployment registers referred to earlier in this article, while they may for a time furnish an excess of eligibles for some positions, cannot be depended upon to meet the full needs of the service at any time.

Reconstruction—A Survey and a Forecast

by A. J. PORTENAR

U. S. Employment Service, Department of Labor

Mr. Portenar has worked at his trade of printing for thirty-seven years; he has carried a union card thirty-two years; he has for four years been in the Employment Service of the State of New York and of the United States. He has met employers as a trade union official and as a public official and has dealt with employes in the same capacities.—THE EDITOR.

THERE is general agreement that there must be a readjustment of the machinery of national industry, but we are not nearly so unanimous as to what is meant by "readjustment." For some, the word "restoration" more accurately expresses what is desired. For others, "demolition and reconstruction from the ground up," would be a summary. Between these extremes, stands a great majority which interprets "readjustment" as "restoration with more or less modification," the degree of modification varying considerably, but the structure of pre-war conditions being in its essentials retained.

The problem is not purely industrial. Adequately presented it would include economic, political and moral phases. But at this moment the emphasis is placed on the mechanisms by which industrial relations may be improved rather than on the fundamental principles on which they rest. When we consider the concrete conditions under which industry will get back to normal peace production, the subject naturally divides itself into two heads: Actions by agreement between employers and organized labor, and actions by employers in non-organized industries.

In the organized industries the struggle will principally concern wage schedules. But there are some industries in which the eight-hour day was unwillingly conceded under the stress of war requirements, and in these industries the length of the workday is likely to be a more bitterly contested question than even wage schedules. And there are other industries which are struggling already for a forty-four hour week.

It has already been made clear that the unions will strenuously resist any reduction in wages. In some instances they are out on

strike now (latter part of January) for increases based on living costs that are still rising. Their claims are that the cost of living is such that any reduction in wages will mean a lowering of the standard of living; that the extremely high prices are largely due to profiteering all along the line, from large producer to small retailer; and that labor was underpaid before the war and entitled to retain its increases even if prices should come down. *Per contra*, employers claim that the high prices are primarily and chiefly due to exorbitant wage demands, and that lower price levels are impossible until wages have been sealed down.

A SURVEY

The course of wage fluctuations usually is that on the upward trend wages lag behind prices; on the downward trend prices lag behind wages. This being so, it follows that rising prices receive their primary impulse from some other cause or causes than advancing wages, although advancing wages may later become a contributing cause to a further rise in prices. Also, by the same reasoning, the removal of the cause or causes which gave the original impulse to rising prices would permit a lowering of prices without wage reductions.

The trend of wage fluctuations in the past four years has been fully in accordance with the rule above stated. The beginning of the war found wages low as compared with then ruling prices, which had for about fifteen years been mounting more steadily and quickly than wages. The demand from Europe sent prices up very rapidly, while wages did not rise as soon, nor as fast nor as far. If we except the metal working trades, in which there was an insatiable demand for skilled mechanics, and in which wages had been for a long time notoriously poor, there was hardly any advance in wages for a considerable period after the commencement of the war in 1914. In fact, during the winter of 1914-1915, there was much unemployment, and to my personal knowledge common laborers in and about New York were working for \$1.75 a day. It was not until the entrance of the United States into the war, when an enormously increased demand was concurrent with the withdrawal of several millions of men from industry, that wages leaped upward, and a more equitable relation was established between the quantity of money in the pay envelope

and what might be bought for that quantity of money. But during that time prices never stopped their upward course, wages being really then a principal factor, but not the only factor in the continuous advance of prices.

In printed sheet and by word of mouth wide advertisement was given to the enormous earnings of individuals. It is not contended that the stories were untrue, but that the inference that everybody was earning the top figures so widely quoted was unfounded. Nor was proper emphasis given to the fact that the big money was largely due to the practice of working days, nights and Sundays. A boy of nineteen was mentioned to me as earning forty dollars a week. Inquiry brought out the fact that he was working thirty-four hours overtime a week. His hourly rate was only forty cents, after he had become a semi-skilled man. Incidentally, the effect on his health was becoming apparent.

As to profiteering, it is not necessary to present argument. An opportunity such as only a convulsion like this war could give was not wasted by those in a position to take advantage of it. Excess profit taxation retrieved for the public use some of the proceeds of the joyous stream of gold, though even with that subtraction there was exceeding fatness. And the little profiteers—certain middlemen and retailers—who got all they could and kept all they got—yes, the war ended too soon for some people.

Among others, one more cause of high prices must be mentioned, and a single illustration will suffice. The *Philadelphia North American* of September 2, 1917, said: "Delaware County is \$25,000,000 richer through four months of war." But further reading developed that it was not the people of Delaware County who had gained that sum. It was the landowners who had been enriched. The same authority added that "Rents have doubled and in many instances gone higher." How many times \$25,000,000 was thus saddled upon the people throughout the country? They made the increased values by their presence and industry; then they were penalized in the form of doubled rents for their homes; and then they paid some more unofficial taxation in the increased prices of commodities for which the doubled rents of factories and stores were the basis. Yet, though it was under their noses, the makers of the excess profits tax failed to see this unearned increment as a source of revenue—a source of revenue so

large, indeed, that had it been taken in its entirety through land value taxation, it would probably have eliminated the necessity for selling liberty bonds, and might have saved us largely from a public debt of fifteen billions. And that would have had a very beneficial effect on prices.

I have been at some pains to show that prices can be lowered by other means than through wage reductions, and have run counter to high authority in doing so. In a Senate debate on January 21, Senator Harding said: "You can't reduce the present cost of living and keep up the present American wage," and without doubt most people of the kind who "count" will think with him rather than with me.

But I repeat that you can. These terrifying prices must come down, and they will seek the line of least resistance in their downward course. If wage reductions offer the line of least resistance, that will be the channel by which they will get down. But in respect to organized labor, that line may not be the line of least resistance. The unions have received large accessions of membership, and they have partaken to the full in the increased consciousness of their social value which has come to all the people because of their universally acknowledged importance in achieving victory in the war. Maybe they will eventually prove to be capable of less resistance than some of the other lines through which price recessions can be secured, but they will not let anybody act on that assumption without demonstrating it by a fight. The effort will be made and the fight will follow.

Perhaps the fight will not follow if machinery (official or otherwise) is maintained for the settlement of disputes without resort to strike or lockout. But even in that case wages will come down little, if at all. It is just as probable that increases rather than decreases will be the subject matter of arbitrated disputes. And here is the reason: The position of both employers and organized labor has changed toward arbitration in the past twenty years. Then "Nothing to arbitrate" was a common expression of employers, and such an attitude by employers was a standing grievance of the unions. Now employers whose people are organized are usually willing to arbitrate, while an aggressive minority of the union membership has adopted the discarded attitude of the employers toward arbitration. Among the majority in unions are

many members who can be swayed toward any course by stronger personalities, and arbitration decisions which are decidedly unfavorable may be met by repudiation. Certainly they will only postpone an upheaval, and not even that for long. The industrial history of the last ten years has shown that it is becoming an increasingly difficult task for responsible union officials to hold the more turbulent portion of their membership in check, and it will be more difficult in the immediate future than it has ever been heretofore.

What has been said of wage disputes is equally applicable to any other disputes that may arise. Discharges are quite likely to take second place as a cause of friction, and it is one of the probable developments of the near future that a review of alleged unjust discharge by some agreed upon tribunal will become a common feature of collective agreements.

The form of arbitration will also be a matter of much debate, even though the thing itself be mutually desired. Official arbitration has been successful from a labor standpoint during the war period, because the Big Stick was generally used on the employer, and because the leaders of organized labor were willing to "take a chance" with official arbitration for really patriotic reasons. But in normal times organized labor is suspicious of official arbitration which has any real power of interference or enforcement behind it, because that is compulsory arbitration in principle and may easily become compulsory arbitration by formal legislative enactment, and that is one industrial policy to which organized labor is a unit in opposition.

The War Labor Board has in the main made decisions satisfactory to the workmen, and its continuance may for that reason meet with tacit approval by them, at least until its personnel and policy are changed. But that very consideration would operate to make its continuance undesirable to the other side. Complaints from employers that the administration and its various agencies have been unduly favorable to labor have been very frequent. An effort to terminate the existence of the board is therefore a probable move on the part of employers.

There will never be any kind of a court whose decisions will please everybody. Yet if any peace at all is to be maintained, there must be a tribunal of some kind to which disputes and

grievances are referable. As applied to industrial disputes, the best form, in my opinion, is a body in which both sides are equally represented in voting power, regardless of numbers present; whose membership is composed of the biggest men on both sides; and whose decisions when rendered are final. It is a question open to debate whether they shall be empowered to call in an umpire when deadlocked, or whether they shall discuss a question indefinitely until decision is reached. Both methods have advantages and disadvantages so nicely balanced that opinion has not crystallized upon either.

Organized labor will have much to say about matters of public policy, such as health and unemployment insurance, and child labor laws. It will increasingly concern itself with policies that are generally regarded as political rather than industrial, such as public ownership of public utilities, methods of taxation, education, and the powers of the judiciary. In this connection, and largely owing to the formation and development of the British Labor Party, there has recently arisen within the body of trades unionism in this country, a movement to form a labor party which would almost certainly take the British party for its model. This movement is due to the growing perception of the fact that industrial injustice may be created or maintained by political instruments. Hence political action is necessary to change those instruments, be they laws or methods of government, in order to remedy industrial injustice.

Mr. Gompers and the Executive Council of the American Federation of Labor are officially on record in opposition to the formation of such a party, while favoring many actions which will be a part of the program of the party. In all likelihood, the party will be formed in spite of the opposition of official unionism. But because of that opposition it will not attain the size and influence which would be its portion if there was unanimity. And for the same reason it will not be an important factor in the settlement of the reconstruction problems of the immediate future. It will be composed of the more radical groups and individuals in the labor movement. Its growth or even its continued existence will depend upon influences outside of itself. If there is progress steady and fast enough to enable the officials of the American Federation of Labor to justify the position they have taken, the

new movement will languish or merge itself into the Socialist Party; but if reactionary influences are able to prevent or greatly retard the items of the labor party's program, the opposition of conservative leaders like Mr. Gompers will be swept aside.

A CROSS SECTION STUDY OF LABOR CONDITIONS IN ONE SECTION OF NEW YORK CITY

When the problems of reconstruction are viewed in relation to the mass of unorganized workers in this country, who form a large majority of the whole number, the picture is vitally different from that presented when dealing with organized labor. The power of employers to impose their will and the power of employees to resist that imposition are both in inverse proportion to the respective powers in the other case. In every particular, from wages to welfare, immediate results will depend upon the temper and degree of enlightenment of employers.

In the district in which my daily work is done, my contact with the industrial situation is intimate, and it is principally the first-hand observations there made that are the basis of my comments. Otherwise, I have only such sources of information, through conversations and printed reports, as are open to everybody. A word, therefore, as to industrial conditions in the Borough of Queens, City of New York. The industries are extremely varied, ranging from airplanes to woodenware, but while the variety is great, most of the industries are represented by one or a few shops, sometimes small. The dominant industry is metal working and machining in many forms, with automobiles, caskets, chemicals, cards, furniture, food products, glass, lumber, paper goods, paints, shoes, textiles and woodworking more or less prominently represented. There are estimated to be at this time 75,000 persons, of which about one-fourth are women, employed in 1,100 industries. The industries of the district, if the building trades are excepted, are in the main not unionized, although union men are scattered among the employees. Those industries which did not go into war work have been somewhat favorably affected from the employers' standpoint by the signing of the armistice; those which did war work have practically suspended operation. The labor market is heavily in favor of employers so far as *number* of applicants goes, but when *quality* is a factor, demands are still rather difficult to supply. In some skilled lines, supply is as scarce as it has been

any time for two years past. But speaking generally there is a considerable excess of idle men over available jobs. If the picture thus drawn of conditions in this district is in its main features a replica of conditions elsewhere, then my observations may be capable of wide application.

As always, the question of wages is uppermost. It is already evident that the employers can reduce wages, and some of them even thus early have gone very far in their efforts to do so. Unlike the men in the unionized trades, the unorganized workers were willing to acquiesce almost immediately in wage reductions, which in most cases ranged from 12 to 15 per cent. For the present, they reject offers which carry reductions greater than that. But if the pressure of unemployment increases, as it seems almost certain it will, past experience indicates that they will make further concessions. An unusual phenomenon is that unskilled laborers are showing perhaps more independence than the skilled workers.

The unorganized workers are now, as they have always been, wobbly as to the amount they will work for; no matter what figure they have determined on, it is always possible that they will shade it a little, although no doubt there is for each individual an irreducible minimum somewhere. For the non-union workers in an organized trade the scale of the union is indirectly but none the less truly the measure of their compensation.

Yet it must be said that up to the present time (late in January), applicants of all kinds have shown more determination to uphold self-created standards than they did before the war. "I can't live on that" is the statement which usually accompanies refusal. The reductions already made seem to have been anticipated and accepted as a matter of course. It is difficult to forecast the future in this respect. Will they submit as they have always submitted hitherto, or will they reverse industrial precedents and offer unexpected resistance? But one thing seems clear—either submission or resistance will be accompanied by more deep-seated bitterness, and probably by more open expression of that bitterness, than we have ever known before. While they have not the aggressiveness and assurance which come with organization, they too have been touched by those intangible currents with which the industrial atmosphere is charged.

On other matters relating to employment they are not vocal. A nine-hour day will be accepted if an eight-hour day is not available. Even a ten-hour day finds some takers if the Saturday half holiday goes with it. It is not they who are talking of arbitration, or discussing industrial democracy. The pay envelope is the engrossing subject of their thoughts and the contents of the pay envelope will determine their state of mind and attitude in this period of unrest—that is, it will for awhile.

The attitude of employers as to wages varies all the way from a willingness to continue indefinitely at the level reached after the initial reduction already mentioned, down to a determination to restore pre-war wages, with the majority looking toward lower, if not the lowest levels. They express gratification at again seeing lines of applicants at their doors in the mornings, and some have recently restored suspended rules to the effect that applications for employment can be made only at that time. I have heard utterances among them which may be summarized in the words, "Our turn now." However, it is only just to say that the majority talk in a way which evinces a new outlook and a greater willingness to concede the existence of a viewpoint other than their own. I was about to say that they were willing to concede the existence of rights other than their own, but that probably is not true. A more accurate statement is to say that they concede that more consideration should be shown than has been customary by those whose habit it is to regard their business as an autocracy and themselves as its rulers.

Our employers are showing decided interest in methods of maintaining industrial peace and promoting good relations apart from that perennial topic of wages. There has been formed in the district a Personnel Managers' Club, which holds frequent meetings, at which the addresses of prominent speakers are followed by open discussion. The phrase "industrial democracy" is used often without startling anybody, although I am inclined to believe that the implications of that phrase have not been critically analyzed. The causes of and remedies for labor turnover creep into the discussions regularly, even when the announced topic bears a different title. Until now academic discussion has been the only result, but the club is only a few months old. It was formed at a time when the problems created by war condi-

tions confronted employers, and the factors of the equation are considerably altered now. So far as I know, none of the members have made any practical changes in their methods of handling the human element in production, nor (again so far as I know), are they considering any definite innovations.¹ They seem to be standing with reluctant feet at a point of departure from familiar paths, their faces turned in the right direction, but themselves not ready to go confidently forward. Not all of them, however; there is among them a considerable number of hardshell Tories, unconvinced of the necessity for change and unafraid of portended consequences.

A FORECAST

My reading of the signs of the times is that only mildly palliative measures may be expected in the so-called "reconstruction" period now before us, and that even these will meet with considerable opposition. There is no definite program such as is outlined in the Whitley report to the British Parliament, and even the American Federation of Labor has not asked for so much as in that report is officially conceded as a minimum for the attainment of improved industrial relations.

In Great Britain there has already been officially set up machinery designed to give the working people a voice in the making of trade agreements and the adjudication of disputes, in non-union as well as unionized industries. In this country the best we have yet secured was an official request made under the pressure of war conditions, that existing means for negotiation and arbitration be continued, and new means created where none existed. The attempts of the War Labor Board to create such new machinery where none existed (i.e., in non-union industries) were a conspicuous failure.

It is a seriously debatable question how long any amount of amelioration in industrial relations, without structural changes in the social edifice, will suffice to keep the working population in a state of reasonable contentment. It is indisputable that the war has been a ferment of tremendous power, the action of which cannot yet be determined. History has shown that a victorious people is usually a complacent people, but there is much reason

¹ I have just been informed that a Long Island City employer is about to establish a profit-sharing system.

to anticipate that in its consequences this war will furnish a variation from historical precedent. Noble sentiments have been widely disseminated as stimulants to warlike enthusiasm; signs multiply that the people propose to give these glittering generalities concrete applications.

There is a general opinion that well organized and reasonably successful trades unionism is immune to direct actionist virus. From a letter written to me on June 10, 1914, by the late Prof. Robert F. Hoxie, is quoted this extract:

I can hardly agree with you that it is only a few Socialists who stand in opposition to the business unions and the pragmatic business union progress. Aside from well defined groups of predatory unionists, mainly in local bodies, I have become convinced by observation and inquiry, that there are between 500,000 and 800,000 men who can be called revolutionary unionists . . . and I find that *many of the revolutionaries are men of age, experience and substance.* (Italics mine.)

Note that Professor Hoxie expressed this view in reply to my assertion to the contrary. But because of things I have seen and heard, I am now inclined to give much more credence to his opinion.

The civilized world stands in living fear of a thing it calls Bolshevism, yet does not recognize the fact that it was our own civilization that spawned and nourished Bolshevism. The world would stamp it out, or at least set barriers to its spread, so there is talk of destroying it with force. But force will not destroy the thing even though it may suppress it for a time, because in justice backed by force was its father and its mother. It will be useless to set a guard against it at the piers where ships dock, for its seeds are implanted in our own industrial organism. No ring of armed men can stay the diffusion of its subtle poison where injustice makes misery, and misery makes desperation. No ring of armed men is needed where the sunlight of justice acts as a disinfectant.

But what is justice? We must formulate a working hypothesis, for an exact definition is impossible. But that which cannot be defined may be described. The test of justice is its inclusiveness; it must be just to all men. Brain and brawn should each receive the full value of work done. If that were given, every one who works would be sure at least of decent subsistence to which he is entitled by the very fact that he has worked.

Decent subsistence is a scarcely definable phrase, not to be stated in terms of money, yet easily comprehended. It means food, shelter, clothing, recreation and opportunity for education; nothing extravagant, nothing luxurious, nothing lacking.

"Economic justice" and "living wage" are not completely synonymous terms, but, directly or indirectly, every issue that arises between employer and employed has in some aspect a bearing on wages. It is held by some that the solution of the wage question lies in increased production. But this is only a partial truth. There must also be equitable distribution of the fund created by production. It is in distribution that the conflict of interest arises, and it is the belief that the employer benefits disproportionately by increased production which underlies the usual attitude of workmen.

I am not one of those who believe that all work is equal in value, and that all rewards should be equal. The law of supply and demand furnishes the only yardstick for measuring the value of work. I will be told that this yardstick is used now. But it is not so. The working of the law of supply and demand is artificially obstructed in our economic life. Big business can hire big brains to find and apply the methods of obstruction. Bribery, intimidation, misrepresentation (printed and spoken), legalism, forcible repression—all these are used. The toxic results of the obstruction are manifested in what is called the economic problem.

Yet there is no danger of catastrophic destruction and complete rebuilding if progress toward justice is permitted to take its naturally slow course through discussion and agitation, unhindered by the artificial obstructions. These come only when the volcano is capped or the stream dammed until the forces thus repressed burst through the bonds that restrain them. The gods could give the great property interests of the country no more fatal gift than too much success in controlling legislatures and finding complaisant courts.

My conscience knows and my writings attest that I wish to secure social justice by orderly procedure. In July, 1913, the Sagamore Sociological Conference invited me to meet Arturo Giovannitti in debate as a competent representative of the labor movement in opposition to I. W. W. propaganda. Is this a cer-

tificate of character, when I warn the captains of industry (yes, and the little fellows, too) that it is not wise to blink the recognition of facts until they see the spectre of hideous spoliation close upon them? They will concede in vain then what now to their minds is far beyond the limits of concession. Nor am I thinking of sops in the form of trifling increases of wages or the installation of this or that feature of "welfare work."

In my narrow field my ear is close to the ground, and the rumblings are ominous, but not yet menacing. From both demobilized soldiers and civilians, come the mutterings. They are not ripe for Workmen's and Soldiers' Councils, but it is not entirely beyond the bounds of the conceivable that they may become so. Everywhere like causes produce like effects, and the anxiety in European capitals today (late in January) is due to fear of the concededly contagious quality of Bolshevism.

There is an emergency problem before us in the present transition period, and emergency expedients are called for to meet the immediate crisis. But let no man doubt that there will remain a fundamental problem of industrial injustice which will only be solved by clear understanding and broad and far-reaching treatment of the permanent factors of our industrial life.

How American Manufacturers View Employment Relations

By STEPHEN C. MASON

President of the National Association of Manufacturers

IT is unfortunate that in all the discussion emanating from the representatives of organized wage-earners relating to industrial standards after the war, "new rights and advantages" for labor are the principal and practically the only topics upon which stress is laid. Much has been heard about the "better times" alleged to be labor's proper reward by reason of "sacrifices" which it is announced were made by the organized groups during the war.

With no desire to belittle the loyalty of the great mass of the workers of the United States, without reference to organizations, it seems the fact has escaped notice that American labor cannot actually hope either to attain, retain or maintain any existing or future "new rights and advantages," unless such privileges are truly connected with public necessity and welfare and shared in by American employers as well as employees. No benefit or advantage can accrue to the employe that does not come from a healthy, successful and expanding industry.

The overwhelming majority of the manufacturers in this country are firm in their belief that absolutism on the part of the employe is just as bad for the general welfare of the nation as absolutism on the part of the employer. The National Association of Manufacturers is confident that, left to themselves without the irritations, exaggerations and agitations of a comparatively small group of individuals, the workers and employers of of the United States would readily find a common and equitable basis on which properly to meet every present and future need.

It is essential, however, in order to provide a more healthful atmosphere in the industrial world, and to ensure the success of the effort to reach and maintain a common ground, that the partners in industry—the wage-earners and wage-payers—be given the benefit of constructive, legitimate and impartial encour-

agement from the government, and a healthy, well-informed public opinion.

Any organization which sets for itself the task, or any part of the task, of creating or sustaining an artificial or abnormal economic condition in American industry is certainly not working for the true and proper interests of its members. It is wasting its time, inviting destruction and running directly counter to public welfare.

In America today we hold the great responsibility of providing example for the rest of the world. Confusions and iniquities which have developed in our American industries during the hustle and bustle of waging war on a modern scale should be and will be eliminated in good time. We must lend our every effort to avoid bitterness, acrimony, calamity, howling or whining. Nothing is to be gained by either side, if there are sides, through cultivation or promotion of misunderstandings. We must be mindful of public tension and public interest in approaching and working out our problems of industrial readjustment.

No manufacturer has or seeks to exercise any rights or privileges which any other American citizen may not have or seek to exercise. In readjusting our industries to a new and proper basis for the work of reconstruction and peace no part of our industrial forces can be asked or expected to give up "advantages" to which it is properly or legitimately entitled. The true measure of so-called industrial advantage, in our opinion, is nothing more or less than a question of public welfare and the national good. No man or group of men has any right to attempt to defend an uneconomic industrial condition when every reason that brought about the abnormal condition has been eliminated.

The National Association of Manufacturers stands firmly for the spirit of patriotic industrial coöperation and good will in the working out of readjustment problems. In time of our national emergency, during the progress of hostilities in France, there was born in our American industrial relations the more general realization that coöperation between employers and employes was a patriotic duty and a privilege, for the nation's safety and prosperity, as well as a good business policy. Distinctly recognizing this important fact, the organized employers of the United States have long since been urging, favoring and pledging that

spirit of common interest in our industrial affairs which the war fostered so greatly among all citizens concerning national duty.

The National Association of Manufacturers, as a body, represents practically every important industry in the United States. Its membership of more than 4,000 is found in every state, and its activities, since its inception at Cincinnati, Ohio, in 1895, have been directly connected with the vital industrial affairs of the nation. Manufacturers within its rank have contributed very largely to the remarkable progress of America, during which the gross value of the industrial output of the entire country, as measured by Census reports, has risen from one billion dollars in 1850 to eleven billions in 1899, twenty-four billions in 1914 (the last normal year) and, considering the very rapid rise in monetary values during the past four years, may be estimated to have doubled the last amount in 1918. Several years ago the annual output of the manufacturing industries of the United States began to exceed in money value the combined annual output of any other two nations of the earth; and the factory production of the members of the National Association of Manufacturers, alone, began to exceed the value of the total annual production of any single foreign nation.

As the president of the Association, therefore, I consider it not only a privilege but a duty to give, as briefly as possible, an accurate account of the nature, scope and purposes of an organization which has grown to be the largest national association in the world whose active membership is wholly made up of manufacturing establishments representing every phase of industry. A clearer understanding and wider appreciation of the spirit of the organization, of the American manufacturer's attitude, and the principles animating the work of the National Association of Manufacturers, may be had by considering and interpreting separately its Declaration of Labor Principles:

(1) Fair dealing is the fundamental and basic principle on which relations between employees and employers should rest.

In this statement we have put tersely our firm belief that fair dealing in industrial relations is not merely incumbent upon those who work for hire but just as much, if not even more, upon

those who, in their capacity as employers, manage and direct industrial enterprises and supervise the collective or individual labors of others. We consider such a policy "good business."

This organization has intensively and unselfishly fostered and promoted in every practical manner the doctrine that every employer should do everything in his power to cultivate and maintain a feeling and condition of human friendliness and brotherhood with his employes. An employer who does not, has poor business vision and is an undesirable citizen. It has always been a puzzle to employers at what stage of the industrial activity they and their employes ceased to be coöperators.

It is a fact that the larger proportion of the most successful employers in this country are men who have seriously undertaken to restore or maintain conditions of friendliness and coöperative good will in their relations towards their employes. Many obstacles to such efforts on the part of employers have been deliberately fostered by influences outside their individual plants, by those who, while harping on the word "exploitation," have themselves actually and most seriously "exploited" the employes.

Fair dealing on the part of employers toward their employes has been demonstrated on more numerous occasions than fair dealing by employes who have blindly followed the orders of certain oldtime masters of the self-profiting art of misleading labor: In this respect much remains to be done in order to clarify the industrial atmosphere and prevent the bickerings, strife and misunderstandings engendered by such labor misleaders and sowers of destructive class hatred and discontent.

Every legitimate and constructive resource at the command of the National Association of Manufacturers has in the past and will continue in the future to be devoted to fair dealings by employers. We feel that, outside of the everyday practical application of the Golden Rule to industrial relations, it is essential that all proper means of education should be fostered and encouraged. This latter need has already been at least partially filled by the nation-wide educational work inaugurated and carried on by the Association since the early part of 1916. In this campaign we made a somewhat successful effort to re-focus the industrial perspective of the American people and give to all classes of

citizens a better understanding of their responsibilities to our industries and of the actual bearing which industrial prosperity has on the public welfare.

Through a carefully selected staff of public speakers, writers, various forms of printed literature, stereopticon slides and moving picture films, we have spread broadcast the constructive gospel of industrial coöperation. The results achieved have been visible already in the recent more general awakening of political leaders, economists, leading employers and bankers, as well as among various craft and trade organizations, to the need for preaching and practising coöperative relations between the employer and the employe.

The work described has been performed by the National Association of Manufacturers because there seemed to be a general public misconception of industrial problems, needs and conditions which had greatly contributed toward industrial inefficiency and the creation of unrest and strife. It has been carried on free of any tinge of prejudice or controversial effort, simply as a constructive educational campaign to make possible the greater realization of that spirit of fair dealing enunciated in the first article of the Association's Declaration of Labor Principles.

(2) The National Association of Manufacturers is not opposed to organizations of labor as such, but it is unalterably opposed to boycotts, blacklists and other illegal acts of interference with the personal liberty of employer or employe.

From its organization this Association has never denied nor condemned the right to existence of labor unions. It has, however, insistently demanded that labor organizations be founded upon an enlightened public consciousness, and their operations based upon legitimate principles, and that they recognize the right of all workers to engage for their services under such lawful conditions as may seem best to them. Such organizations should establish responsibility for their contracts. Power without responsibility always leads to abuse. There can be little room for doubt that the general disuse into which such labor union tactics as boycotts and blacklists have happily fallen in recent years has proved not only their illegal nature (as numerous court decisions proclaim)

but the emphatic disfavor of the general public regarding such practices.

"Cruel," "cowardly," "immoral" and "anti-social," are some of the judicial characterizations of the un-American labor union weapon, the boycott. The pernicious nature of both this practice and that of labor union blacklists is that they are serious invasions of the rights and personal liberties not only of the employer and employee, parties to a dispute, but inflict injury on third persons who are not interested parties in the controversy. We equally condemn any such practices on the part of employers. Against such oppressive illegal acts the Association has stood and always will stand firm.

(3) No person should be refused employment or in any way discriminated against on account of membership or non-membership in any labor organization, and there should be no discriminating against or interference with any employee who is not a member of a labor organization by members of such organizations.

This declaration embraces the fundamental principle that every person who labors must have the freedom to engage for and deliver his or her services without interference; conversely, every employer of labor must have the freedom to hire the class, grade, quantity and quality of labor best suited to his needs. This is the definition of the important industrial principle of the "Open Shop." It is a principle that should neither be denied nor compromised in the interest of either employers or employees, and is a sound doctrine interwoven with certain inherent, individual, human rights. An analysis of this tenet shows it to be neither offensive nor destructive. On the contrary it is a safeguard of a sacred individual human right whether it is industrial in application and exercise, or otherwise. It is a concept upon which our Constitution and political institutions are based.

(4) With due regard to contracts, it is the right of the employee to leave his employment whenever he sees fit, and it is the right of the employer to discharge any employee when he sees fit.

This declaration is based upon the vested individual rights of employee and employer. No one questions the right of any em-

ploye to terminate his employment when he desires to do so, but this does not carry with it the right to conspire with or influence fellow workers to quit simultaneously with him, to the injury or interference with their employer's business, or to undertake to prevent anyone from taking the position he has left.

On the other hand, it must be recognized that the employer has absolute freedom in the selection of employes that he considers will be satisfactory and efficient for the services required with compensation for such service at the prevailing rates of wages, and the right to dispense with such services whenever he desires to do so.

(5) Employers must be free to employ their work people at wages mutually satisfactory, without interference of dictation on the part of individuals or organizations not directly parties to such contracts.

Personal and legally recognized property rights vested in the builders, managers and owners of industrial enterprises, are involved in this article of faith. Old established common law rights of individuals to enter into such proper contracts as may seem best to each party thereto without interference on the part of third or outside persons are simply defended by this principle. It contains the timely sentiment that individual initiative and the institution of private property is something worth making the greatest sacrifices to preserve. No effort is made to infringe upon any vested or recognized rights or privileges of employes in such a doctrine. Indeed, by stoutly asserting the specific rights of employers, as such, an indirect service is done to workers and an acknowledgment made of the fact that our industrial elements have certain clearly defined limitations in their relations with each other. No one is more vitally concerned in the right of individual contract than the worker. This right was denied in old English statutes and common law and the securing and establishment of this right was one of the first steps toward emancipation of the employed.

(6) Employers must be unmolested and unhampered in the management of their business, in determining the amount and quality of their product, and in the use of any methods or systems of pay which are just and equitable.

Herein is enunciated the fundamental condition of the successful conduct of business that the owners and managers of manufacturing establishments must be protected in their right to operate their plants without outside interference, according to the natural and legally defined regulations of commerce. The principle demands free exercise of individual business judgment and initiative, without which there would be little, if any, incentive to engage in business enterprise, and indirectly insists upon a recognition that the principles of management are primarily and distinctively within the province of plant owners and operators, and the intervention of outside, uninformed individuals or organizations is neither desirable nor proper in theory or practice. As the success and expansion of business depends primarily on management, it clearly follows that you cannot hamper management without injuring industry.

(7) In the interest of employes and employers of the country no limitation should be placed upon the opportunities of any person to learn any trade to which he or she may be adapted.

Unrestricted opportunity for industrial education of the youth of the land so that there may be produced efficient industrial workers, is the underlying thought involved in this statement. It implies a complete rejection of the erroneous and harmful principle of trade unions by which limitations are placed upon the number of apprentices permitted to be employed in the skilled trades. In recent years there has been a widespread awakening of public interest in the subject of vocational training. Municipal, state and even the federal government, realizing the dire necessity for the more general systematic industrial training of our youth, have undertaken extensive plans in this direction. For more than twenty years the employers of the country embraced in the ranks of the association have not only recognized the urgency of this problem, but have consistently made every possible effort to increase the opportunities of any person to learn any trade to which he or she may be adapted. The widespread recognition of this question during recent years is an indication of the soundness of the position taken by the Association upon this question.

(8) The National Association of Manufacturers disapproves absolutely of strikes and lockouts and favors equitable adjustment of all conditions between employers and employes by any amicable method that will preserve the rights of both parties.

This portion of our principles we honestly regard as a long standing monument to the American employer's recognition of the need and value of the maintenance of industrial peace. It will be noted that no specific recommendation as to a means to this end is contained in the principle. This in itself is an absolute refutation of the charge that employers have generally favored any iron-clad form of industrial armistice. Furthermore, no reference is here made to any special views which the employer may entertain as to various forms of industrial arbitration and conciliation which have been tried and in many instances found wanting.

The attitude of the organized employers of the nation in disapproving emphatically of the strike, which is commonly regarded as labor's chief weapon of offense as well as defense, has been no less emphatic with respect to disapproval of the lockout which has been regarded an offensive and defensive weapon of employers. Concretely put, it is the feeling of the members of the Association that the complicated question of wages and related industrial problems, in the interest of industrial development, must be met with the utmost fairness of which human intelligence is capable. The belief is now more general than ever among the employers of America that the old-time selfishness of both the employer and the employe must absolutely be put aside and each be content, the worker to engage for his labor at a reasonably proper wage and the employer to hire labor on the same equitable basis. Going a step further, it is our firm belief that a more common recognition of the actual partnership relation and joint responsibility which exists between the man who pays a wage and the man who receives a wage, would be the greatest single contribution to the cause of industrial peace and prosperity that is capable of achievement.

(9) Employes have the right to contract for their services in a collective capacity, but any contract that contains a stipulation that employment should be denied to men not

parties to the contract, is an invasion of the constitutional rights of the American workman, and is against public policy and in violation of the conspiracy law. This Association declares its unalterable antagonism to the closed shop, and insists that the doors of no industry be closed against American workmen because of their membership or non-membership in any labor organization.

The evident purpose of such a declaration as this is the affirmation of the sacred and unassailable constitutional right of every worker and of every person to engage for his labor in a free and unrestricted market. Despite the efforts of many to garble and destroy this vital industrial truth, it is unquestionable that the prosperity of this country depends upon strict adherence to this fundamental rule of liberty and justice. The employers of America regard this principle as something that cannot, in the interests of free institutions, be abridged by legislation. In other words, we insist that no man or group of men whether employers or employees, has any right to place a brand upon any human being and say that those so branded, regardless of merit, are entitled to special privileges, and in the same breath to say that those who are not so branded and not willing to be so branded must be limited in or prevented from the full exercise of their constitutional rights.

It may be timely to record the fact that the question of collective, shop bargaining, or coöperative representation already has had earnest consideration by a large number of manufacturers throughout the country, and practical and successful plans embodying such purposes are already in operation in many important establishments. In the adoption of these industrial representation plans no question is raised regarding the membership of workers in outside organizations.

These plans present a method by which employees can deal collectively, through representatives selected or elected by them, with their employers in relation to all questions and conditions of employment. They will furnish a new channel of communication between wage-earners and wage-payers whereby they may better be able to avoid misunderstandings and mutually agree upon satisfactory adjustments of wages, working conditions, etc., and promote and establish such friendly relationships and coöperative spirit as will be beneficial and to the best interests of both. Such

activities are clearly within the scope of this principle of our organization.

(10) The National Association of Manufacturers pledges itself to oppose any and all legislation not in accord with the foregoing declaration.

This principle, the last of the ten embodied in the Association's declarations, is nothing more than a pledge that we will use all proper and legitimate effort to prevent the passage of laws designed by self-seeking interests, to contravene, infringe upon, or take away from the human elements engaged in our manufacturing industries the sacred and inherent rights and privileges involved in any and all of the nine preceding declarations of principles. A careful analysis of the position enunciated in these principles we believe will convince any unprejudiced mind that they are unassailable and might well be adopted throughout the United States, as a sound basis for the conduct and guidance of American industrial relations, in meeting and solving the many existing problems of readjustment.

The spirit of the chartered purpose of the Association is best interpreted in the one word "service"; service first to our country, second, service to our fellow men, both the toilers in the humblest trades and men of genius charged with vast industrial responsibilities; lastly, service to the perpetuation of America's magnificent manufacturing structure.

International Business Coöperation

BY EDWARD A. FILENE,
Boston, Mass.

THE question today is not: Shall we have a League of Nations?

A league is in process of formation even as we discuss it. The point of concern has shifted. The most important single question before the world today is this: *What kind of a League are we going to get?* Questions of reconstruction and readjustment, questions of permanent prosperity for business, questions of democratic progress, questions of social advance are at this moment all secondary to that question. Unless we get the right kind of league, the outlook for sane readjustment, the outlook for business prosperity, the outlook for a finer development of democracy, and the outlook for solid social advance are sorry outlooks indeed.

I want to make two observations upon the question as to the kind of league we want and discuss them briefly in turn. These observations are as follows:

(1) The right kind of league must rest upon a constructive peace based upon justice and sound principles of organization.

(2) The right kind of league must take into account the fact that the lasting peace of the world must be based upon effective and harmonious working out of the problem of business relations between nations; and the fact that there are several pressing problems of business and economics that must be met by international coöperative action if the peace of the world is to be kept during the next few years, not to mention lasting peace.

A CONSTRUCTIVE PEACE

In the first place we must have a constructive, not a patched-up peace. A patched-up peace might for a time satisfy the individual wishes of individual nations, but it would contain the germs of another war. It is not make-shifts and temporizings that we want—we must provide for a lasting peace. At the beginning of the war surgeons attempted to deal with leg wounds by removing just the infected parts, but they soon found the mortality rate following that method was extremely high; then they adopted

the more heroic method of amputation when the case looked doubtful—the mortality rate immediately dropped. The statesman's problem is today a good parallel to the surgeon's problem. The time demands heroic treatment. A constructive peace is one that provides for a lasting peace by a straight-forward dealing with those forces and factors the bad or inadequate administration of which will produce friction that will lead to another war.

Some of these specific things I will discuss in a moment; but this much should be said at this point; we must have enough international organization—courts, councils of conciliation, commissions of adjustment and administration for certain matters, provision for common action to defend the common peace of the world—enough international organization to introduce and keep order and stability in the international situation or business will not have either the chance or freedom to develop along normal and healthy lines. The old condition of insecurity, not to use the stronger term anarchy, in the international situation is a standing bid to reckless, destructive, and ill-considered radicalism. Some business men are likely to shy at the suggestion of any increase in control; they are likely to say that business does not want to add international control to national control of which they already have quite enough.

But it must be remembered, and far-sighted business men are saying, that business cannot succeed permanently save in an orderly and stabilized world. The disorganization of Russia and Germany is not exactly the sort of situation in which business can prosper. So American business men, purely on a basis of self-interest as well as high purpose, have a very deep interest in seeing prevail such measures as will stabilize conditions in Europe. As business men, it is our duty to our interests no less than to our ideals to give profound and sustained attention and consideration to the problem of bringing every possible pressure upon the men who are writing the treaty at Versailles and the men who will be called upon to ratify the treaty at Washington to see to it that the treaty provides for the kind of league that will deal in man-fashion with the elementary problem of keeping order in the world, that is, a league that will really set up those organs of law and order which have proved effective in keeping order between individuals, and a league also that will boldly face

the problem of treating internationally those specific problems of food, raw materials, shipping, business opportunity, and the like which if rightly administered are going to mean bonds of common interest and understanding between the nations and greater freedom for the healthy development of business the world over, but which if wrongly or weakly administered will mean simply the setting of the stage for another war. And that brings me to the second observation I want to make.

Now there are certain things like food, shipping, and tariffs, which if left for each nation to administer solely upon the basis of immediate selfish interest will make for friction and discontent and drive the same masses into the camp of reckless radicalism. Therefore business men are interested in getting a league that will insure a treatment of these things that will prevent this. Let me discuss these specific matters in turn briefly:

A POSSIBLE SHORTAGE OF SUPPLIES

Food Stuff. On every hand we find serious students of the situation predicting a world shortage of supplies after the war. The more farsighted students contend that if the world faces famine after the war it will be due not primarily to inadequate resources but to the inadequate administration of the world's resources. We find, for instance, the memorandum of Inter-Allied Labor War Aims declaring that some systematic arrangement on an international basis, of the distribution of the world's foodstuffs, is imperative in order to prevent the most serious hardship and even possible famine in one country after another. But whatever the cause,—famine, the threat of famine, or even the fear of famine,—it involves certain serious and far-reaching international effects. (I use the word famine in a relative sense to indicate a really serious shortage of supplies.)

A real shortage of necessities in *any* country will concern *every* country because it will tend to breed revolutionary discontent or may even prompt to foreign war the nation that is pinched. The real maintenance of lasting peace is finally more dependent upon its being seen to that there is such an equitable distribution of the supplies of the world among all nations as will meet their imperative needs, than upon any purely political or diplomatic arrangements we may effect.

The outlook is that there is but one thing that will effectively forestall the threat and consequences of a world shortage of supplies, and that is something approaching a coöperative international administration of the world's necessary supplies. I am not thinking of any hard and fast international economic government. I am not thinking of the appointment of an economic generalissimo. We are not liable to turn the business of the world over to a Foch of commerce. I am thinking, however, of a certain international arrangement, which the United States is in a peculiar position to initiate, under which the total resources of the world might be administered in a manner that would best speed up the processes of reconstruction, remove the fear of famine from the world, allay some of the more patent economic causes of revolutionary discontent, and help maintain the peace of the world.

We faced the threat of a shortage of supplies during the war but we met it by the common sense action of coöperative international administration. A food shortage threatened the Allied nations, but each nation appointed its Hoover; they got together; result—there was enough food to go around. This principle was increasingly applied to the whole range of the economic needs of the nations at war with the Central Powers, until finally we achieved a unity of economic administration almost equalling the unity of our military administration. This unity of economic administration for war time was coördinated with finance through the Inter-Allied Finance Commission; with shipping through the Inter-Allied Shipping Council; with export and import relations through an Inter-Allied Board, made up of representatives of our War Trade Board and corresponding bodies in the Allied governments.

In the same way munitions, food, fuel, and other supplies for the prosecution of the war were handled by coöperative action. We saw admirable results from the international pooling agreements regarding nitrates, tungsten, tin, and other such commodities. Subordinate to the Inter-Allied Councils, commodity committees were organized. Now the result of all this economic coördination was that we assured an adequate supply of the materials necessary for the war, and succeeded in organizing the distribution and transportation of these supplies so that the needed

materials were in the right place at the right time and in the right quantities.

Raw Materials. In the matter of raw materials it is even more apparent that it will not do to leave the placement of raw materials to the give and take of bargaining as in the past, with some nations at a decided disadvantage. The getting of raw materials is so tied up with internal content and discontent in every nation and thereby with the maintenance of lasting peace, that the best interests of the whole world demand the existence of some international body that shall study the question of raw materials in the light of its international implications and see to it that the raw materials of the world are distributed in the manner that will best promote the healthy progress and best preserve the peace of the world. Lasting peace will be a foolish dream unless every free and law-abiding nation can get the raw materials needed for subsistence. We may well shudder at the possibilities of international friction leading to war latent in an unregulated scramble for raw materials in which the rule prevailed of let him get who can and let him keep who has.

THE CONTROL OF SHIPPING

Every big sea nation must have its ships, for ships mean not only transportation, but they mean that the nation that controls sea-transportation will have a very great power to control prices at least on raw materials and foodstuffs and eventually if that control is not disturbed might control the finances of the world. It seems therefore clear that ocean transportation after the war will exert marked influence on prices and is therefore basic in any consideration of domestic or world trade. Goods made and sold in this country contain in their market prices the costs of transportation and generally speaking the market price rises and falls in a manner to absorb this cost of transportation while necessarily diminishing the profit of either the producer or middle man.

On goods we export, however, the market price is bound to accord—if we really succeed in world trade—with the world's market price, and any excess in the cost of ocean carriage must, as a general rule, be deducted from the price the producer is able to get. Such deduction under ordinary circumstances affects not

only what he exports but also what he sells at home. This means that if in peace time the price of wheat at Liverpool is, say, \$2 a bushel and the cost of transportation to Liverpool is 10 cents a bushel, the seller in this country will get about \$1.90 per bushel for his wheat. If the cost of transportation, however, to Liverpool is 50 cents, the seller in this country will get about \$1.50 per bushel for his wheat.

Evils similar to these formerly complained of in railroad rates may occur in ocean carriage. There may, in the absence of adequate regulation, occur understanding and combinations leading to great shipping trusts which may exert monopoly power. Under such conditions rates may tend to create other monopolies of buying and selling. Ports may, under such circumstances, be unjustly discriminated against and extraordinary speculation in prices and commodities may be possible.

The same reasons, therefore, that hold good for the regulation of railroads by an interstate commerce commission may likewise hold good for the regulation and control of ocean carriage through some international arrangement, say an international commerce commission. Such a commission is to be welcomed, not feared, by our business men, including our ship owners.

Fixed rates that are reasonably profitable for ocean carriage will give us what we need most—a dependable basis of calculation on which to make offers to buyers in foreign countries and a more dependable and consistently profitable business for owners.

Merchant ships are a part of a nation's defensive power. Until the league of nations which we must have has proved its efficiency, and until nations are ready to disarm, they will not be ready, if they can prevent it, recklessly to turn over their sea transportation to another nation. This lesson has been strongly impressed on all nations by the war. As a result every nation with sea interests will strive for a merchant marine of the biggest size. It is inevitable that there will be an over-production of ships—that is, the nations will duplicate in shipbuilding and in a few years there will be more ships than are actually needed for the carrying work of the world. Ships will then become a less desirable and less profitable investment, and in an effort to adjust matters old and bad forms of control and combination may occur. In any event under such conditions transportation rates will be

extremely low at one time and extremely high at other times according as the temporary necessity for ship transportation is pressing or otherwise. So here again the business-like thing to do is to try to foresee what is likely to happen and to work out some form of international coöperation that will avoid these dangers.

Under the conditions the world is facing, if we use our ship power regardless of the needs of the other nations, that is, without a business-like generous international agreement, we shall not only fail to reap the expected advantages from it but we shall endanger the peace of the world. More than that, we have won our shipping superiority largely while other nations were fighting our war, and if we use it without regard to the pressing needs of those who fought our war then we shall be in great danger of making the world believe that we were insincere in our statement of our war aims—aims for which we were willing to sacrifice the lives of our soldiers and for which we should not now hesitate to use generously our economic advantages.

NECESSITY FOR INTERNATIONAL COÖPERATION

It is unnecessary to do more than mention in passing the friction that is latent in the tariff question unless we bring the federated and coöperative thought and action of all nations to its solution. Now the friction and misunderstanding that will inevitably grow out of these questions I have mentioned *must*, if business is to go on profitably in any country, reach a basis of conciliation and agreement. Two methods lie open for reaching such agreements—either the forced bargaining between individual nations or the treatment of them in an international clearing house for discussion and adjustment such as a finely conceived league of nations can afford. The first is the bungling, slow, costly, and finally the disastrous policy. The latter is the method that sound business judgment will dictate. This set of considerations alone makes a league of nations a matter of business necessity.

Now the point with which I want to close this discussion is this: The emergency demands of the trying years just ahead of us will clearly demand such coöperative international action as will help maintain the internal content of all nations by assuring all nations justice and equality of opportunity for economic development—and just such coöperative international action in mat-

ters of common economic interest among nations is one of the essential features of any league of nations that is to succeed in maintaining lasting peace. So if the business men of America, with their accustomed breadth of vision and sincere devotion to the common welfare of the world, rise to this greatest opportunity of their lives and dedicate the business strength of the United States to leadership in an international partnership for administering the economic necessities and opportunities of the world in such a way as to meet the emergency demands of the next few years, they will thereby be laying the foundations for what will perhaps prove the most important part of the league of nations and will make the major contribution to the maintenance of the future peace of the world.

The moral recoil of the world from the horrors of this war, joined to the constructive statesmanship of the world, will doubtless bring about some kind of a league of nations to restrain a law-breaking and aggressive nation in the future. Shall not American business do its part in completing the structure and broadening the function of such a league so that it may remove the causes of, as well as deal with the occasions for war?

The World-Wide Trend Toward Coöperation

By FRANCIS H. SISSON

Vice-President of the Guaranty Trust Company of New York

WE alone of all the great nations have escaped the blighting effects of the world war; we alone have emerged from the struggle stronger than ever industrially, financially and economically. All mankind needs our help—not our charity, but our coöperation.

We cannot render the service demanded of us, however, if we fail to recognize the fact that while it is necessary for the sake of national prosperity to remove the coercive restrictions of government control as rapidly as practicable it is equally imperative to retain government coöperation with industry, and to preserve many elements in the coördination of our varied business interests effected by the exigencies of the great crisis through which we have just passed.

The spirit of combination, in fact, is manifest throughout the universe. It is exemplified in its larger economic and political aspects in the movement now under way at the peace conference to establish a league of nations.

SIGNIFICANT SIGNS ABROAD

This world-wide tendency is nowhere more pronounced than in England, France, Belgium and Italy, who bore the brunt of the battle for world democracy.

The British Government is striving by various means to foster joint action and coöperation among its industrial elements, as a vital reconstruction measure. For instance, the committee appointed by the government to investigate the iron and steel trades reported that "we are persuaded that only solidarity of action will enable the iron and steel industries of the United Kingdom to maintain and improve their position in the markets of the world. The Committee recommends also that coöperative effort, backed where it is found necessary by government support, should endeavor to deal with the question of ore supplies." Combinations are suggested for the purpose of standardizing production

and reducing costs. The Committee of Engineering Trades proposes that English manufacturers work in large units, formed either by amalgamations or by joint operations, for the pooling of resources and the specializing of production, as well as for the purchasing of raw materials. The Textile Trades Committee recommends that, in view of the modern tendency toward larger units of production and the elimination of economic waste and inefficiency, there should be combinations or working agreements which would avoid duplication of effort and materially decrease buying, producing and selling expenses. The English Shipping and Shipbuilding Committee has directed attention to the need for effective coöperation and coördination among shipbuilders and marine engineers.

To meet the new conditions presented in world trade, the desirability of concentrating banking credit has long been obvious to the bankers of England and, as a result of amalgamations, the leading English banks recently showed these huge deposits:

London City and Midland	\$1,570,000,000
Lloyds	1,500,000,000
London County, Westminster & Parr's	1,250,000,000
Barclay's	1,100,000,000
Union of England and Smith's	900,000,000

English bankers and business men believe that, in order for them to compete effectively for the world's trade with other countries, this concentration of credit and the extension of branch-banking are necessary steps. Without banking leadership foreign trade cannot be commanded. The effective use of such powers by Germany has taught this lesson. The German banks trading abroad not only were useful financial institutions, but acted as information bureaus for their countries, and their work in this field was largely responsible for the remarkable development of German overseas' trade. German banks not only established subsidiary banks, but in many instances obtained controlling interests in native institutions, giving them a large measure of command of foreign banking transactions.

Even while fighting with "her back against the wall," in the dark days of the war when Germany was hurling its hordes against the Channel ports, England was forming amalgamations for peace business, not only in banking but also in various trades

and manufactures. And England is moving toward larger industrial, commercial and financial units because she is impelled to do so by the sheer force of circumstances, and has had foresight enough to see that only through such means can economies be effected which will prove important factors in foreign trade expansion, as well as in successfully meeting foreign competition in the home markets.

The French Government has created a central purchasing and distributing organization to facilitate the reconstruction of devastated provinces. It is known as the Central Association for the Restoration of Industrial Activities in the Invaded Regions. This association has formed a central buying agency bearing the title of Central Bureau for Industrial Purchases for the Invaded Regions, and the French Chamber of Deputies has voted the association a fund of \$50,000,000.

French steel men believe that one of the best ways for America to help them is by placing at their disposal, as soon as practicable, some tried forms of coöperative selling. The French steel makers do not wish to be obliged to obtain prices from several hundred American firms, but prefer to obtain them from the representatives of groups of manufacturers of steel equipment. These representatives should be in a position to take the blue prints and specifications prepared by the central purchasing office of the French steel industry and name prices and dates of delivery on every piece of machinery and every pound of material needed to enable the French makers to resume the manufacture of steel on the sites of their old plants.

The Société Mineraux et Metaux has sent agents to this country to inquire into all phases of the mining and metallurgical industries and to gather data on them, for the purpose of assuming a leading rôle in the buying here of lead, copper and zinc for use in France. This society has a capital of 10,000,000 francs, and represents a coöperative organization of metal interests for the purpose of keeping them in contact with the producers of the world and fully informed as to statistical data of the mining and metallurgical industries. Among its shareholders are twenty-six mining or metallurgical companies, representing interests in France, Spain, Mexico, Algeria, Tunis, Siberia, Chile, Bolivia, Italy and Russia.

A central reconstruction purchasing committee, similar to that formed in France, has been organized in Belgium. And recently there was constituted at Milan among the most important firms in Italy carrying on an import trade in industrial machinery and machine tools from the Allied countries, the Italian Association of Importers and Merchants. The purpose of this organization, as outlined in the statute authorizing it, is the study, protection and promotion of all those interests appertaining to the importation of the articles mentioned.

AMERICA'S NEED FOR COOPERATION

With preparations such as I have briefly indicated under way in the leading European countries, which are planning to reduce their enormous indebtedness by increased exports and decreased imports, the American manufacturer and exporter can readily appreciate the fact that they will face the keenest competition they have ever experienced, particularly in those markets which the war has opened to us. And it should be remembered that the productive capacity of the United States has been greatly expanded by the necessities of war. One authority has estimated that the income of the people of the United States for 1918 totaled \$73,400,000,000, as compared with \$68,800,000,000 for 1917, and \$34,800,000,000 for 1913. Unless we are able to maintain the trade advantages gained abroad during the last four years, it is obvious that we will be confronted with the serious necessity of adjusting our productive capacity to a shrinking market. And we cannot hope effectively to meet foreign competition unless we coöperate as our foreign competitors are doing.

But we cannot adequately coöperate outside of the United States if we are compelled to indulge in costly and wasteful competition within our own borders. Our existing anti-combination legislation, in fact, is not only out-of-date but is a positive menace to our industrial and commercial future. We shall deny ourselves the full advantages of the Webb Law unless we repeal the Sherman Anti-Trust Law.

Combination in itself does not, and never has, constituted a danger to this nation or to any other nation, but through ignorant and scheming demagogues, inspired chiefly by political ambitions, the American public has come to view any combina-

tion of business interests as an incubus, regardless of whether such a combination makes for the general weal by eliminating economic waste; and the public apparently has lost sight of the fact that *all combinations should be judged by their operations and purposes*. I am a firm believer in the regulatory efficacy of basic economic laws, and I have confidence not only in the integrity of the majority of our business men, but also credit them with the ability to realize that their prosperity is contingent upon the prosperity of the general public.

Let us not forget that England will make heroic efforts to regain her former trade and also to capture a large part of that controlled by Germany. Her people are united in that ambition, they are willing to make the necessary sacrifices to realize it, and, therefore, they are in a far better position than we to compete for the trade of the world. They have the tremendous advantage of lower costs, and that applies to all important factors in obtaining and holding foreign trade, namely, banking, manufacturing, exporting, shipping, and seamen's interests. All those engaged in such activities are willing to take a smaller margin of profit than their American competitors. They are willing "to play the long game," so to speak, and it would be difficult to exaggerate the importance of this advantage to England.

Comparisons made recently between costs of production in this country and its chief competitors are not encouraging. It is asserted, in fact, by some of our larger exporters that unless they can materially lower their costs of production and delivery they cannot hold their own in competition with foreign manufacturers. British dealers already have regained a lead in some of the more important markets, due to their better preparations for after-war conditions; better shipping facilities, lower freight rates, especially to the more distant markets—such as South America and the East, and to the maintenance of better selling organizations, even under the duress of war. And yet the British Government believes that it is imperative to reduce costs still further, through obtaining greater multiple production in England by encouraging amalgamations and combinations among manufacturing, financial and shipping interests.

Under our present laws it is impossible for an American ship to carry cargo as cheaply as a British or Japanese vessel, due to the

high cost of operation. Whether our government will enact laws that will enable our ships to meet this situation remains to be seen. It is certain that our maritime interests will not attempt to operate any of the new vessels for their own account under the present laws, for British and Japanese owners can under-bid them every time because the British and Japanese laws are not so drastic as our own. Meanwhile we shall continue to pay heavy tribute to England in the form of ocean-freight tariffs.

NEED FOR GOVERNMENT COÖPERATION

It would appear to be clear, even from a cursory consideration of the subject such as this, that we are urgently in need of coöperation, not only among our industrial, commercial, transportation and financial interests, but also between the government and these important elements in our economic life. The most vital problem confronting business, indeed, is that regarding the relations which shall be established in the immediate future between the government and industry.

Stringent government control in peace times would certainly constitute a deadly menace to commercial and industrial interests. It would stifle competition, undermine ambition, and discourage initiative. It would offer no incentive to high endeavor. A reasonable protection of the public welfare by the exercise of a proper coöperation on the part of the government is quite another matter. That would not result in a repression of business, but rather in a relationship under which industrial concerns would remain in private hands; competition that causes economic waste would be eliminated; and capital and labor would each prosper in proportion to its respective contribution to national production, and in proportion to the public interest served.

Under such a system we should, indeed, have national reconstruction—reconstruction which would create understanding and recognition of sound principles and methods, a high sense of justice and fairness, and a general coöperation for the best results attainable for all concerned and for the nation, which has a new and great part to play in world affairs. It would dispel the overhanging menace of impractical idealism which exists at Washington, and to some extent elsewhere, and of which business men must take cognizance. The obvious intention on the part of

some to force government ownership of transportation and wires, if possible, and the announcement of a policy of philanthropic restraint in foreign trade, are but straws indicating the direction of the wind. In pursuit of such economic will-o'-the-wisps, some minds are led astray and would lure us into the bogs of Bolshevism. The facts of human experience and human nature have always proved a safer basis for human relations than the tissue of dreams or the visions of what ought to be. Justice and fair dealing are not impossible in a world of sound economics, and these standards furnish us a sounder platform than parlor socialism or political expediency. If the spirit of common equity and reason can pervade government bureau and legislative hall, as well as business office and bank, we may hope for a readjustment to the conditions of peace which will bring prosperity to our own people of all classes, and render useful service to the entire world.

Combinations for Export Under the Webb Act

By JOSEPH E. DAVIES

Attorney-at-Law, and former Chairman of the Federal Trade Commission

THE report of the Federal Trade Commission on Coöperation in Foreign Trade was issued on the thirtieth day of June, nineteen hundred and sixteen. The commission recommended that legislation be enacted to permit combinations solely for export trade, in order to remove existing doubt as to the legality of such organizations under the Sherman Law.

PROVISIONS OF THE WEBB ACT

Largely as a result of this recommendation, the Webb Bill passed the House of Representatives on September 2, 1916. The original House bill contained two clauses that negatived the purposes of the bill. It was provided that export trade should not "be deemed to include the production, manufacture, *trading in or marketing within* the United States or any territory thereof, of such goods, wares or merchandise or any act in the course of such production or manufacture." Again it was provided that such action should be confined to such as "does not restrain the export trade of the United States." It would be manifestly impossible to obtain goods for export in the United States unless the organization were to trade or market in the United States. Further, it would appear that such a combination to be effective must "restrain export trade." The bill did not pass the 64th Congress.

The bill was, however, passed by the 65th Congress and approved April 10, 1918, with the objectionable features eliminated. In general terms, the act as finally adopted declared that nothing contained in the Sherman Law should be construed as making illegal a combination entered into for the sole purpose of engaging in export trade or acts in furtherance thereof providing there were no resulting restraints of domestic trade, or of the export trade of a domestic competitor, nor any act of any kind whatsoever which artificially or intentionally enhanced or depressed prices, substantially lessened competition or otherwise restrained trade in

the United States. The prohibition of Section 7 of the Clayton Act, prohibiting certain intercorporate stock holdings, was lifted so far as the acquisition of stock in such an export combination was concerned, if no domestic restraint of trade resulted. The prevention of unfair methods of competition in export trade against competitors engaged in export trade was vested in the Federal Trade Commission, even though such methods were employed without the territorial jurisdiction of the United States, as was also the general administrative supervision of the provisions of the act. The public records of the commission, consisting of the articles of incorporation and by-laws of the various combinations, show that American business men have been prompt to avail themselves of the provisions of the law.

Up to this date of writing, the statements required by this law have been filed by the following organizations:

Allied Construction Machinery Corporation	Douglas Fir Exploitation & Export Company
Allied Machinery Co. of America	Dunnellon Phosphate Co. (The)
Allied Mfgs. Export Corp.	European & Far-Eastern Sales Co. (Inc.)
Allied Sugar Machinery Corporation	Export Trade Association (Inc.)
American International Steel Corporation	Factory Products Export Corporation
American Paper Exports, Inc.	Fajardo Bros. & Co. (Inc.)
American Parchment Export Co.	Franklin International Corp.
American Steel Export Co.	Galban Noecker & Co. (Inc.)
American Steel Export Co.'s Brazilian Corporation	Galena Signal Oil Co. of Brazil
American Webbing Manufacturing Export Corp.	Harper & Co., Locke T.
Amsinck & Co., G. of Mexico, Inc.	Herzberg & Son, B.
Automotive Products Corporation	Holsam Co. (Inc.)
Copper Export Assn., Inc.	International Clearing House of New York (Inc.)
Cosmo Trading Co.	Levy Co. Inc., A. A.
Cranz (Inc.) F.	Manufacturers Agents Co. (Inc.)
Cranz Importing Co., F. E.	Markt & Hammacher Co.
Deco Co.	Markt & Schaefer Co.
Deister Miners Supply Co.	Maxim Munitions Corporation
DeLima, Correa & Cortisoz, Inc.	Mexican Importing & Exporting Corporation
Dodge & Seymour and	M. P. Trading Co. Inc.
Dodge & Seymour (China, Ltd.) a subsidiary company	Muller, Maclean & Co. (Inc.)
	Pan-American Exporters, Inc.
	Parsons & Whittemore (Inc.)
	Redwood Export Co.
	Semtrec (Ltd.)
	Simmons Co., Thomas W.

Southern Products Co.	United States Handle Export Co.
Sparks & Co., W. J.	U. S. Office Equipment Export Assn.
Strong & Trowbridge Co.	United States Paper Export Association
Sydney Ross Co.	
Texas Co. (South America) (Ltd.)	Zaldo & Martinez Export Co. Inc.
The	Zoccola Co. (Inc.)

An examination of the charters filed would indicate that a great many, perhaps a majority of the combinations covered by them, have not complied with the act inasmuch as they are not *solely* engaged in exporting from the United States to foreign nations as the act requires.

It appears that export houses engaged in import as well as export trade seem to have found difficulty with the provision of the law which makes it apply solely to combinations for export. Many export houses, it would also appear, have filed reports out of an excess of caution in the fear of the penalty imposed by Section 5 of the act.

Since the passage of the act, the associations which have attempted to qualify under its terms for the most part have been in the corporate form. There are some few instances, however, of those who have merely combined, by contract or otherwise, under the terms of the law as "two or more persons, partnerships or corporations." While statements filed, generally speaking, have been designed to comply with the act, it is an interesting fact that by far the majority have failed to get completely within the terms of the act in that they have been organized for purposes in business other than that of solely engaging in exporting from the United States.¹ This is particularly significant, for unless they are formed under the express provision of the law, *solely for export trade*, they acquire no protection and are amenable to the provision of both the Sherman Law as to restraints of trade, or conspiracies to monopolize, and as well to Section 7 of the Clayton Law, forbidding interlocking stock ownership, as provided therein.

SALIENT FEATURES OF TYPICAL ORGANIZATIONS

It may be of interest to note some of the salient features of some of these typical associations. The capital authorizations vary as

¹ See *Annual Report Federal Trade Commission* 1918, p. 40.

do also the requirements as to the amounts to be paid in under the charter as a prerequisite to doing business. The following are typical:

	<i>Authorized Total Capital Stock</i>	<i>Amt. With Which Begun Business</i>
Allied Sugar Machinery Corporation	\$200,000	\$2,700
American Steel Exports.....	500,000	2,000
Douglas Fir Exploitation & Export Co....	200,000	Has been in business several years
Manufacturers Agents Co. Inc.....	2,000,000 maximum 200,000 minimum	
American Paper Exports.....	1,500,000	800,000
Automotive Products Corp.....	500,000	
American International Steel Corporation.	1,000,000	2,000

Stock and Voting Power. The voting power of the stock of these organizations varies. Some give to each share of stock one vote. Others provide that voting power shall accrue alike to each stockholder regardless of the amount of stock owned. Still others base the control and voting power upon the proportion of production of each member the preceding year, or on combined considerations of proportionate production and stock ownership.

Limitations on Membership. There are also varying provisions with reference to eligibility for membership. Some of the organizations, such as the Copper Export Association, Inc., open their membership to all producers. Others limit membership to manufacturers or distributors of a certain class or of a certain territory; while still others prescribe that no other members shall be admitted except upon consent of the original signatories, who prescribe the terms of admission.

Limitation to Prevent Single Control. In order to prevent control of the association through the acquisition of stock by any one member, one lumber export association has made the following provision:

All of the stock owned by the stockholders in this corporation other than one share each, to be held by the stock trustees of this corporation, shall be assigned to and held in trust by the stock trustee or trustees whose power to sell and dispose of such capital stock so held in trust shall be limited to sales thereof to legitimate manufacturers of lumber on the Pacific Coast only, and such sales shall be further restricted so that no one manufacturer individually or through affiliated interests shall ever become a majority owner or holder or be able to exercise a dominating control of the capital stock of this corporation. Whenever any

person, firm or corporation shall make application to become a stockholder in this corporation and to purchase one or more shares of its capital stock and such application is approved by the Board of Trustees or such committee or officer as it shall thereunto authorize, a share or shares of the stock so held by such trustee or trustees shall be cancelled and a like number of shares in lieu thereof issued to such purchaser who shall forthwith endorse and deliver the same to said stock trustee or trustees to be held with like stock by such stock trustee or trustees. No sales or transfers of the capital stock of this corporation to any other than an actual manufacturer of lumber on the Pacific Coast shall be valid and in case of the death of any stockholder or the dissolution of any corporate stockholders or the insolvency or bankruptcy of any such stockholders or in case any stockholder voluntarily for a period of one year cease to continue in the manufacture of lumber, then and in that event this corporation shall have the right to call in, retire and cancel the capital stock so held by such stockholder upon payment to the heirs, executors, trustees or successors in interest of such person or corporation to an amount equal to the par value but not exceeding the par value of such stock.

Manner of Making Sales. Differing methods of making sales have been adopted, usually depending upon the intent of the organization as to whether it shall be purely coöperative on an expense basis only or whether it is designed to produce profit for the exporting corporation. One organization provides that all the foreign business of its members shall go through the association, invoices to be charged to the association and by it charged to the foreign purchasers, collected from them and when collected paid back to the proper party, minus a fixed percentage to be agreed upon from time to time sufficient to approximately cover the cost of carrying on the association. The cost of carrying on the association is to be prorated among members on the volume of sales of each party through the association, bad debts being treated as joint expenses. Funds are advanced by each member on which they are entitled to charge interest at 6 per cent until the proper adjustment can be made, this interest being recognized as part of the expense of the association.

Another association provides that its board of directors shall fix a minimum price for export sales. The executive committee then makes quotations within its discretion but not below this minimum price. The association receives 3 per cent on the amount of the sale from the mill accepting the order, such commission being known as a "flat brokerage" and is entitled to a further "overage brokerage" of one-half of the difference between

the price quoted by the member mill and the price at which the product is sold to the customer. The flat brokerage is to be paid ninety days after the shipping date of the order whether or not shipped, and the overage brokerage fifteen days after the due date of the invoice. Each member quoting includes the flat brokerage in his quotation.

Still another export association guarantees payment of all accounts sold by it and agrees to pay the manufacturer upon receipt of settlement from the customer, in any event not later than ten days from the date of receipt by the company at its office of complete shipping documents, the company deducting its commission which is $2\frac{1}{2}$ per cent of the F. A. S. mill value. A portion of this commission is to be spent in developing and increasing export trade. Others are to be assigned on the basis of quotas determined by the board of trustees. All export sales are to be made exclusively through the company. Orders assigned to a manufacturer are to be considered accepted unless objection is filed within five days from date of order. Contracts containing the above provisions are made for one year continuing in force thereafter unless terminated by ninety days' notice. Disagreements are to be decided by a two-thirds vote of the board of trustees.

Penalties and Settlements of Disputes. Provision is made quite commonly that failure to perform on the part of members shall be subject to penalty and that disputes shall be determined by the board of directors. Thus one association makes provision that in the event of the failure of a stockholder to observe and comply with the requirements and the conditions of the by-laws of any requirements of the board of trustees adopted in pursuance thereof or to carry out any provision or agreements of the contracts or to discharge any obligation to it, the board of trustees may repay or tender the stockholder the book value not exceeding the par value of said capital stock, less any indebtedness owing to the corporation by said stockholders, and may thereupon cancel said stock and re-issue said shares of stock either to the stock trustee or trustees held by said trustee of stock or to some person, firm or corporation who may become a stockholder in the corporation. In the event of the cancellation of the shares of stock it is provided that all right and interest of the original holder in and to the shares of stock shall immediately cease and determine and the

same shall be forfeited to the corporation. Another provides that if a member is unable to make delivery as agreed and an extension of delivery is not satisfactory to the vendee, the corporation may cancel the purchase and place the order with another member mill at prices, terms, etc., not exceeding those of the original sale. The original mill must under such circumstances pay one-half of the flat brokerage, the new mill paying the regular brokerages the same as if the order were received originally by it. In case of unreasonable default in delivery, a member is not entitled to further orders until the delinquency is made good.

Division of Profits. Provisions with reference to the payment of dividends upon the stock vary, dependent upon whether the purpose of the association's activities are to bring profits to its membership apart from the organization or to declare the same in dividends to stockholders.

The Douglas Fir Exploitation & Export Company provides that the board of trustees may declare dividends out of the surplus profits whenever deemed advisable but such dividends shall be limited to 7 per cent per annum upon the capital stock actually paid in. All surplus earnings after payment of operating expenses and the creation of a fund to meet estimated business losses and the payment of the 7 per cent dividend, are to be devoted to ways and means of increasing and extending foreign trade in Pacific Coast forest products provided, however, that the board of trustees may in their judgment create a fund for repaying the principal of the capital stock subscribed for in the corporation to the company so subscribing and paying to the said subscribers and their successors in interest.

The Manufacturers Agents Company, Inc., provides that the board of directors may fix the sum reserved as working capital and determine what part of the accumulated profits shall be declared in dividends to the stockholders and also determine the use of any surplus or net profits over and above the capital stock paid in.

The American International Steel Corporation provides that the board of directors may declare dividends out of the surplus or net profits at such times as they may determine and before payment of any dividends they may set aside out of the surplus or net profits such amounts as they think proper as a reserve to meet contin-

gencies or for equalizing dividends or for any other purposes deemed beneficial to the interest of the corporation.

The Copper Exports Association, Inc., provides that cumulative dividends at the rate of 7 per cent per annum and no more shall be paid on the preferred stock but none on the common having no par value of which each member is to have one share. Before declaring any dividends, the directors may reserve out of accumulated profits such sum or sums as they deem proper for a reserve fund to meet contingencies or for other purposes they think conducive to the interests of the association.

THE FUTURE OF COMBINATIONS FOR EXPORT

What the actual results from these organizations may be, it is too early to predict. The intensity of the nation's effort in the winning of the war, the scarcity of shipping tonnage for commercial use, the disruption of channels of international commerce, are all still felt; and operations planned are scarcely under way. The limitations in the law itself in the provision that makes these associations apply solely to export trade also tend to impede the most rapid progress, as most enterprises can be most effectively conducted by the integration of import with export. The provisions of the act in the public interest looking to the protection of the domestic consumer within our own territorial limits from the effect of these associations must also be closely scrutinized in the planning for foreign markets. Unfair methods of competition are inveighed against by the law in foreign commerce even though projected beyond our territorial boundaries, if inimical to domestic producers in the same manner as they are prohibited by the Federal Trade Commission Act, in interstate commerce. These provisions all call for careful scrutiny and judgment in the planning as well as in the projection of these enterprises.

An export agreement among western fir producers prior to the passage of the Webb Act proved highly profitable in increasing output and receipts, and it may be expected that similar results will accrue under these more favorable conditions. Conditions, obtaining in foreign parts, which brought about combined purchases there as against competitive sellers from the United States may perhaps be fairly expected to be offset by these organizations of sellers.

One of the distinctive features of international commercial rivalry prior to the war was the existence of the cartel, the comp-
toir and the "ring"—which gave great advantages to our com-
petitors in the world's markets, certainly as against the smaller
manufacturers who could not afford the hazard of foreign mar-
kets, with attendant overhead expense, credit risk and extended
organizations. It may be that these organizations in modified
form will be supplemented in some fields by government monop-
olies. If that be the development, it will probably be through
still further extension of the principle of the Webb Act that we
will be enabled to hold our own in the markets of the world.

The Trade Association as a Factor in Reconstruction

By FRANKLIN D. JONES

Counsellor at Law, Washington, D. C.

ONE of the basic changes arising out of the war the world over has been the far-reaching control of industry by government. In our own country, the business man during the war has in a large measure had the conduct of his business taken from him through government control of raw materials, fuel, transportation, distribution, prices and capital. The heavy and sometimes clumsy hand of federal regulation has been felt by every manufacturer and tradesman. Competition in many industries has been paralyzed.

The first step in reconstruction is the restoration of open and wholesome competitive conditions. In our own country, happily, economic and political thought in the main favors it and governmental action is already directed to that end. Industrial democracy giving to every man the opportunity to win business success on merit and efficiency is still to be the purpose of government regulation. Monopoly and combinations in restraint of trade are still taboo, not only for their inherent viciousness but because their inevitable effect when consciousness of power is increasing in the great groups of our citizenry is to lead to socialism. If industrial power becomes too greatly centralized, the people as the possessors of sovereignty,—as the last and ultimate authority,—will either exercise a control as heavy as that felt during the war or take possession for themselves. It is vitally to the interest of industry, therefore, that competition free, fair and unrestricted be reestablished. Just as the trade associations, through their war service committees, rendered invaluable service to the government and their industries during the period of government control, so now they can become a great and constructive factor in the maintenance of competition.

Unfortunately the trade association of the past has concerned itself largely with such matters as control of prices, curtailment of production, or division of territory, and in so doing has run

afoul of the law. Yet its action only too often arose from the sheer desperation of its members over conditions which threatened the ruin of the industry. Competition was blind. Manufacturers were selling by guess work. Secrecy and bitter trade enmities were the rule. As a result, some industries were in a state of chronic and chaotic disorganization. Manufacturers inveighed against such conditions as the result of a competitive system forced upon them by the law. Such conditions, on the contrary, were wellnigh as foreign to a status of fair, wholesome competition which the law seeks to preserve, as the monopoly which it endeavors to prevent. The government was partly to blame for this situation, as it devoted its efforts largely to the prevention of monopoly without seeking to strike at all its causes. The Federal Trade Commission, however, promises to become a great factor not only in the prevention of improper restraints upon competition but also in the elimination of the unhealthy and unsound conditions of competition which breed the restraints.

But great changes are seldom superimposed. The democratic, individualistic spirit of the bulk of American business men, finding its expression through the working organizations of their industries, the trade associations, can and ought to demand that American industry be placed upon an efficient, healthy, competitive basis in the period of readjustment ahead. In so doing, they will fight for individual opportunity and against socialism which is the sure offspring of centralized industrial power. The trade association can become a great force working for industrial democracy, yet bringing to the manufacturer enduring financial benefits which in the long run outweigh the danger and uncertainties of the use of practices counter to the spirit, if not in violation of the law.

ELIMINATION OF SECRECY

Secrecy in competition has always fostered unhealthy conditions. It has denied to every business man the facts upon which he can guide his business efficiently. Without the facts as to prices and production conditions, he has been forced to carry on blindly, the easy prey of buyers who desired to play the jealousies and suspicions of competitors against each other. Instead of facts, he has had a tangled mass of rumors, hearsay statements

and partial data from which to attempt to draw the truth. Price discriminations in violation of the law are almost inevitable under such conditions. Ill-will between buyer and seller are a sure result. As a result prices in more than one industry have gone to ruinous levels, and competitors have adopted such trouble-making and perilous expedients as gentlemen's agreements. Yet much of this could have been avoided by a frank, open exchange of information.

It would be the ideal plan were the government to collect and disseminate figures as to prices and production both because the authenticity of the data would be more certain and the possibility of its misuse eliminated. Such a system was at one time contemplated by the Federal Trade Commission. The Department of Agriculture already furnishes such a service to growers. But in the absence of governmental action, the trade association can be the vehicle by which the same result can be accomplished. The history of some twenty or more trade associations within the past few years has clearly demonstrated that manufacturers through their association organization can exchange information as to their prices and their production so that every manufacturer can have facts instead of suspicions upon which to base his independent competitive policy absolutely free from any concert of action within the condemnation of the law.

During the next year or two of readjustment involving sudden and radical changes, a knowledge of facts will be vital. Figures on production, sales, prices, and demand conditions can be and have been compiled in weekly or monthly reports to members and basic facts prevailing in the industry summarized for the benefit of the business man. The inevitable effects of such a system is to tend to create more stability in price and more normal conditions generally in the industry. It eliminates the disastrous competition arising from distrust or guesswork and supplants it with straight business competition based on facts. It creates the status of competition the law is designed to protect and removes in large measure the danger of monopoly. Unfortunately the business man who makes a fetish of so-called business secrets, fails to appreciate the advantages following from such a policy and by his refusal to coöperate creates the conditions he is first to denounce.

COST ACCOUNTING AND UNFAIR PRACTICE

Not all ruinous competition, however, is the result of secrecy in trade. A good part of it springs from ignorance. The manufacturer who does not know his costs and who sells by guess work is a dangerous element in his industry because his sales policy can sometimes force an entire industry into selling its output at ruinous levels. Selling below cost is recognized as an unfair method of competition. Trade associations in coöperation with the Federal Trade Commission have already made tremendous strides in impressing on their members the necessity of knowing their costs. But it is a work which must constantly be kept up if competition is not to sink back into the old ways.

The trade association, by persuading each of its members to install methods whereby he may know what he can, from a sound business standpoint, do to meet competition, will have gone a long way toward maintaining that status of competition which the law encourages. The action of the Reconstruction Congress of American Industries at Atlantic City in December of last year, in adopting resolutions favoring the adoption of uniform cost accounting in every industry in the country, emphasizes the great importance of cost accounting as a factor in stabilizing industry. But uniform cost accounting should be very carefully distinguished from uniform costs. The association which engages in the latter is restricting competition and will inevitably come into collision with the law.

Unfair methods of competition have long been recognized as the favorite weapon of those aspiring to monopoly. Such methods are now expressly prohibited by the Federal Trade Commission Act. In many industries today there are questionable practices in use, some of them carried down through the years and often forced upon the industry by the action of the minority of its members. Such practices can be eliminated only by the united action of an association acting if necessary in coöperation with the Federal Trade Commission.

Secret commissions, misbranding, bribery and the like are typical. In one industry, secret commissions to buyers have in some instances within the past few months been given to an amount equaling 20 per cent of the value of the sale. Obviously such a practice forces high prices or inferior goods on the public,

demoralizes the trade and prejudices the best interests of the industry and of the public. The trade association offers the machinery for the elimination of such practices. And is it not far better for an industry to do this itself than to be forced to do so through hostile actions by the government? All it takes is a little give and take, a little belief in each other and an elimination of the old spirit of secret, unfair competition. The National Varnish Manufacturers Association and the Paint Manufacturers Association of the United States acting together, for example, have established an unfair competition bureau which within a year has done really remarkable work in ridding the industry of the practice of paying secret commissions to buyers, a practice which had been forced on the entire industry by the action of some of the trade. The National Association of Printing Ink Makers has maintained a similar bureau. The Silk Association of America has done much in eliminating misbranding in the silk trade.

EFFICIENCY IN PRODUCTION

Aside from any question of the perpetuation of competitive conditions in trade, it is beyond dispute that American industry must direct its efforts towards securing the greatest possible efficiency in production and distribution. Considerations of world competition as well as domestic conditions demand it. In some industries, the small manufacturer has not the capital to maintain the most efficient standards of production. To him in particular there is an increasing need for the coöperative action which the trade association can furnish.

Probably no one factor enters so directly into a determination of efficiency in production as labor costs. Labor with a growing class consciousness is demanding new rights or privileges. The rising standards of wages and living in the old world remove the obstacle to broad spirited constructive action on the part of capital. The new republic, Czecho-Slovakia, has already adopted a law for an eight-hour day and insurance against unemployment. The wage scales in England and France have increased tremendously. Strikes are occurring the world over for an eight-hour day. To American industry, the situation is at once a warning and an opportunity. Without the fear of low priced foreign com-

petition, the American manufacturer can better the working and living conditions of his employees, and from satisfied workers secure a maximum production.

The seriousness of the labor problem demands the united consideration of leaders of American industry. The trade association can be the agency through which the problem is worked out constructively in each industry. It is the organization of an industry. The experience of its members with successful profit-sharing plans, bonus systems, housing plans, and other measures to improve the living and working conditions of labor, can be made mutually available, and problems peculiar to the industry can be given scientific study.

The trade association could perform no greater service than in dispelling the old feeling of hostility and replacing it with a feeling of trust and coöperation between labor and capital, which alone will make for the most efficient production. It will require the diplomacy, the powers of head and heart of the leaders of the industries whose united judgment should be placed at the disposal of their industries through their organization, the trade association.

SCIENTIFIC RESEARCH

In America, only the great corporations have been able to indulge in the expense of laboratories and research. The small manufacturer by reason of this fact has been greatly handicapped in competition. In France, the trade associations (*Syndicate Patronaux*) support lecture courses and professional schools, maintain laboratories and issue prizes for valuable research work done. Among trade associations in this country, particularly those containing the small independent manufacturers in their membership, similar action would be of tremendous value. Scientific research has not only aided, it has created new industries during the war.

A very few associations, among which may be mentioned the National Canners Association, the Paint Manufacturers Association of the United States and the National Association of Tanners, have each established coöperative laboratories to their great benefit. If such an institution is impracticable in a particular industry, at least fellowships can be established in the universi-

ties for special research in the problems of the particular industry. The University of Pittsburgh has a special organization for conducting research work for trade associations. Associations may also utilize the existing laboratories of the government such as the Bureau of Standards and the Bureau of Mines, and by their united action endeavor to secure legislation looking to the establishment of a great national laboratory such as that for which the government of England is making provision.

Such a laboratory would be of inestimable service to the small manufacturer. One of the foremost activities of Germany leading to her great industrial development was her intense interest in industrial research. American industry, if it is to do more than follow other nations, must develop vigorously this phase of its activities. In this movement, the trade association can lead by unifying and organizing trade sentiment in each industry.

ELIMINATION OF WASTE

We have now reached the state in national development where we should carefully husband our resources. Some trade associations have already taken important action in this direction. Just before the war, an association of steel manufacturers employed an expert to devote his whole time to searching out and eliminating waste in their respective plants. In every industry, there are methods costly and wasteful in operation. In one it may be an over-extension of the idea of service; in another the use of an excessive number of grades and sizes; in another a lack of coördinated information on credits; in another an extravagant use of samples.

The work done by the Commercial Economy Board under the Council of National Defense during the war shows the possibilities of standardization and economy. It has been estimated that this board, coöperating with the clothing trade, has saved nearly two million yards of cloth by the reduction of size of samples alone. The implement industry and the wagon industry have made great savings through the adoption of standard types. The sure effect of the successful adoption of such methods is to reduce the capital investment in raw materials and finished products and to free the manufacturer's capital for productive purposes. The mutual exchange of information as to wastes, methods

of correcting them and their study by experts can be accomplished by an association at little expense and with lasting benefits to its members.

EDUCATIONAL WORK AND LEGISLATION

Education of the public and of the trade reacts most favorably on an industry. In recent years, trade associations have just begun to appreciate the benefit of publicity. The growers of California and Florida, the Portland Cement Association and several of the lumber associations have spent many valuable page advertisements in introducing the public to the associations and the uses, old and new, for their products. Here is a great field for the trade association, scarcely touched as yet, for increasing demand and securing the volume which makes for lower prices and the development of the industry. There is a competition between industries just as vigorous as competition between individuals in which coöperative advertising can become a great force.

At least one association, the National Wholesale Grocers Association, has also adopted the long-sighted policy of educating the customers of its members on the use of more efficient trade methods. It has distributed thousands of pamphlets among retailers dealing with such subjects as, for example, the care of perishable foods. Increase in efficiency of any of the factors of distribution will inevitably redound to the benefit of the entire industry, and it is a work the trade association can well undertake.

The next few years will see legislation of the utmost importance under consideration. The business man has been prone to censure Congress for passing laws affecting him, but often he has made no effort to present facts as to the proposed legislation to the proper authorities in an effective way. Legislation yearly is being enacted on such subjects as taxation, tariffs, workmens' compensation and the like. With the whole world in readjustment and reconstruction it becomes vitally necessary to the business man to be organized to protect his interests in no haphazard way. The trade association representing the interests of a single entire industry is the ideal agency through which the business man may make his influence felt on legislation. The trade association need not be, and it is far better that it should not be a lobbying agency. The day of the lobbyist is gone for-

ever. An association can with much more effectiveness be the means through which facts can be compiled, organized in a comprehensive way and presented to the authorities in such a manner as to compel interest and attention. Such a course will make certain a consideration of the interests of the industry as they relate to pending legislation.

FOREIGN TRADE

The great increase of productive capacity in this country has made essential a permanent substantial addition to our foreign trade. Heretofore, the products of American industry in the main did not greatly exceed domestic demands but in many industries at present, war demands have resulted in the development of production which America cannot possibly absorb. In such a situation, an increased foreign trade is vital.

As soon as the American leaves his country's borders to engage in world trade, a new condition of things confronts him. He faces mass competition,—the fight of industrial interests of one nation against another. The industries of Germany have for a number of years been united into effective organizations called cartels, controlling production and prices. France has *comptoirs*, or great central selling agencies for her industries. Japan, during the war, has been forming similar export combinations and the Board of Trade of England has for two years or more been urging the formation by British manufacturers of the same type of organization for British foreign trade. In some industries before the war, great international combinations dividing territories and controlling prices had been formed. Competition in foreign fields is truly international and due to the absence of any effective regulation by an international body, it is apt to be hard hitting and not always honorable and fair.

Against such competition every American industry should present a united front. The trade association offers the organization through which this can be largely accomplished, provided American exporters can submerge their individualism and appreciate the importance of coöperative action in furthering the national interests of their industry. The government has given its coöperation by the passage of the Webb Act which permits with few restrictions the formation of associations or combinations solely

for export trade. Every trade association should study conditions to determine whether an organization of such an export combination among its members is practicable. Great American corporations do not need the help afforded by it but to the small manufacturer it gives an opportunity to enter effectively into foreign trade and thereby to secure the stabilizing effect of diversified demand with the utmost economy of operation. Already a considerable number of such export associations have been formed. The copper, lumber, paper and steel industries have already been organized. The privileges to combine for export trade permitted by the act are not limited to manufacturers, and other agencies are taking advantage of them. In the lumber industry, the wholesale distributors are forming an export corporation.

Aside from assisting in the creation of strong organizations for foreign trade, the association can assist in many other ways. It has the working machinery for coöperating with government departments in disseminating literature of the departments relative to foreign trade problems. It can aid, through publicity, in the elimination of trade abuses or faulty methods which hamper American trade abroad. It can help in bringing about the fixing of standards of quality for articles for export trade, just as the various trade organizations of Japan are now coöperating with the government in the maintenance of definite export standards in some of her industries. Associations, too, can establish direct personal relationship with the business men of foreign countries. The Illinois Manufacturers Association did a great deal to establish cordial relations between South and North American business men by a tour made by the members of the association through South America several years ago, duplicating on a large scale the common practice of chambers of commerce in this country who visit communities in territory their members serve.

ASSOCIATION OF ASSOCIATIONS

With American industries entering as they are in a large way into world competition, the need for unity of purpose and action necessitates a coördinated organization which will represent them as a whole. Great governmental problems relating to shipping tariffs, commercial treaties and the like, which directly affect all

branches of American industry, will be in process of determination within the next few years. What an effective aid in their solution would be a great organization so builded that it could speak for separate industries or for American industry as a whole. And what a controlling factor it might become in shaping the foreign trade policy of American exporters along constructive lines, aiding in the elimination of abuses, arbitrating differences, and building up an international good will for all the products of American industry. The trade association—representing as it does the united interests of an entire industry, is the ideal unit upon which to base a great and efficient organization of this character. The Reconstruction Congress of American Industries was to a large degree made up of official representatives of trade associations. The possibilities of such an organization in domestic affairs alone are shown by the importance attained by the deliberations of this meeting. In Germany, trade associations and other interests have for years been organized into a great association known as the Hansabund. In France, great unions of trade associations or syndicates have been permitted since 1884 and several such as the Union of the Metallurgical and Mining Industries are of an importance that can scarcely be exaggerated. A similar organization in America founded on right principles and having behind it the unlimited resources and resourcefulness of American industry could become a great constructive force in national and international affairs. In the absence of international regulation of international trade, it is a national necessity.

The Federal Trade Commission and the Meat-Packing Industry

By WILLIAM B. COLVER

Chairman, Federal Trade Commission

ON July 1, 1917, there became available, by act of Congress, an appropriation of \$250,000 to the Federal Trade Commission and another of \$50,000 to the Department of Agriculture to be devoted to a study of the advancing costs of foodstuffs and especially to an inquiry as to whether there was reason to believe that the production, preparation, storage distribution and sale of foodstuffs were subject to control or manipulation.

The general subject was subdivided, and wheat, flour and breadstuffs, meat, canned fish, canned vegetables and other kinds of food were treated separately and the department and the commission arranged a division of the tasks. As to meat, the Department of Agriculture undertook the study of the cost of production of meat animals, their transportation and sale, feeding in stockyards and certain economic questions. The Federal Trade Commission undertook to follow the animals from the stockyards through the processes of slaughter to the preparation of the various products; and the Department of Agriculture undertook the study of the disposition or marketing of the products and by-products.

The Federal Trade Commission went back about thirty years and began its inquiry as of a time when the meat-packing industry was just beginning to evolve its present form.

The commission found and reported its belief that beginning with the "dressed-meat" or "Allerton" pool in 1885, there has existed, through one device or another, up to the present time, combination and agreements between the principal packing concerns of the country, and that at present this agreeing group consists of Swift & Company, Armour & Company, Morris & Company, Wilson & Co. (Inc.) and The Cudahy Packing Co.

The commission reported that the control of markets and market conditions now rests largely upon an agreed division of purchases of live stock in definite and fixed percentages. The five packers deny this and assert that, in fact, they are in real competi-

tion one with the other and that any apparent uniformity of purchase percentages arises from "plant capacity"; each concern buying enough live stock to meet the needs of its plant.

This claim is contrasted by the commission with the fact that, during a whole year, the five packers, buying in the twelve greatest live stock markets, varied less than one per cent from a fixed percentage of cattle purchase, though the variations in the various markets were often very wide and though during one week so few as 60,006 cattle were sold on the twelve markets as against 190,686 sold during another week.

The commission reported its belief that, through ownership or control of stock yards and mediums of market information; through "split purchases," "part purchases" and "wiring on," together with agreed division of purchases, the market and market conditions were controlled both as to the sale of live stock by the producers and the purchase of meat products by the consumer.

The details of all this—the effect on competitors, the financial ramifications, the relations with railroads and the operations of the packers in foreign countries—are too complex to be set out within the limits of this article. They have been published as a public document by the commission.

The commission called attention to the fact that the huge surpluses arising from the operations in meat packing were being invested in other related and unrelated enterprises to such an extent and to such a progressively increasing extent that actual control of the nation's food supply in the hands of the five packers—or three of them—is entirely probable. These enterprises are quite aside from the "by-product" articles and relate largely to substitutes for meat.

The commission concluded that, as to meat, the unfair advantage of the five packers over producer, consumer and competitor, lay largely in the control of means of transportation, marketing and storage, i.e., through the control of stock cars, refrigerator cars, stock yards, cold storage houses and market information. It concluded further, that the integration with the meat-packing business of scores of unrelated food enterprises was not in the public interest.

The commission did not, however, recommend the public ownership nor operation of the packing houses. In one of the pending

bills it is proposed that both meat packers and the facilities for transportation, storage and marketing be placed under federal license, much as was advocated as long ago as in 1904 by President Roosevelt and his then Commissioner of Corporations, James R. Garfield, with respect to interstate corporations.

The commission recommends further that Congress show its determination to go to any lawful extent necessary to reestablish competitive market conditions, by "authorizing an appropriation" by which the facilities for transportation, marketing and storage might be acquired by the government by lease or purchase and operated either by lessees or licensees of the government or by the government itself.

However it should be noted that the pending legislation carries no appropriation whatever and therefore no step further than the licensing of the conduct of packers and the use of the facilities is properly under discussion. This is rather an anti-climax in view of the uproar that has been raised about "government ownership" but it is the simple and unsensational fact.

It has been charged that the Federal Trade Commission was prejudiced and unfair in its investigation and especially that it refused to receive witnesses offered by the packers or to permit packers' attorneys to cross-examine. Chief among these complainants is Swift & Company.

The fact is, as to Swift & Company, it never offered a witness and never requested that its attorneys examine or cross-examine. It addressed one telegram to the commission long before the investigation was authorized by congress offering access to its books (already provided for by law) and couched in language suggested in writing by its attorney. The purpose of this telegram, as stated by the attorney in his memorandum, was to abort the investigation. The only other communication from Swift & Company was another telegram months after the investigation had closed and a summary of the report had been made public.

The commission has made no suggestion of limitation of profits or invasion of property rights. It does believe that a restoration of free market conditions and the disentanglement of the meat-packing business from substitute food and other business enterprises would be in the public interest and that such reasonable and conservative remedies applied now will avoid the necessity for more drastic measures later.

The profits of the five packers reduced to a claimed per-pound basis are cited by the packers as proof that there is competition in buying and selling. The profits subject to correction, are as follows:

ESTIMATED PROFITS

	Armour	Swift	Morris	Wilson	Cudahy
1912	\$5,702,000	\$8,745,000	\$1,813,000	\$†1,326,000	\$1,129,000
1913	6,158,000	9,449,000	1,917,000	†1,364,000	1,329,000
1914	7,640,000	9,651,000	2,206,000	†1,209,000	1,402,000
1915	11,156,000	23,387,000	2,321,000	†2,464,000	724,000
1916	22,849,000	24,195,000	4,890,000	5,314,000	3,511,000
1917	*27,137,000	47,236,000	8,012,000	8,319,000	4,935,000

RATE OF ESTIMATED PROFIT ON NET WORTH (CAPITAL STOCK AND SURPLUS)
TAKEN AT BEGINNING OF FISCAL YEAR

1912	6.0%	8.6%	6.9%	†	7.1%
1913	6.1	8.7	6.9	†	7.8
1914	7.3	8.5	7.5	†	7.9
1915	10.2	19.8	7.5	†	4.0
1916	19.2	19.1	15.0	14.5%	19.4
1917	*19.8	33.4	22.6	29.6	23.2

REPORTED VOLUME OF SALES

1912	\$263,307,000	\$300,000,000	\$134,430,000	†	\$90,444,000
1913	349,897,000	400,000,000	165,909,000	†	104,409,000
1914	354,801,000	425,000,000	158,983,000	†	109,121,000
1915	380,157,000	500,000,000	177,040,000	†	116,162,000
1916	479,969,000	575,000,000	219,781,000	\$186,998,000	133,961,000
1917	*577,366,000	871,276,000	268,792,000	225,000,000	184,811,000

* Not including South American business.

† Figures known to be unreliable.

‡ Rates not available.

It is claimed that their profits reflect only a greatly increasing volume of business and a unit-profit, figured on a claimed per-pound basis, is so small (a fraction of a cent a pound) that only enormous volume of business, utilization of by-products, broad spread of comparatively low overhead and economical operation make any return on investment possible.

Small independent competitors, however, without great volume of business; with higher unit overhead; buying livestock in the same markets at the same prices and selling meat in the same markets and at the same prices; with handicap instead of advantage and without the economies claimed for minute integration are found to make satisfactory return on net worth.

If 1917 represents the claimed delicate balance between profit and loss, then how can these five packers have run up from small investment to enormous net worth without the investment of new capital but by the "ploughing under" of undivided profits? For example the original Armour investment in 1868 was \$160,000 and by October 27, 1917 the net worth of the concern was shown as \$156,126,680 while during that time some \$27,828,000 had been withdrawn as dividends.

The Government and the Packers

By L. D. H. WELD

Swift & Company, Chicago, Ill.

ONE of the principal reconstruction problems is the question as to how far the government is going to continue the regulation that it has assumed over the industries of the country during war times. The most vital problem is perhaps in connection with the railroads, but the government has extended its functions during the war emergency to a surprising degree in the regulation of prices, the limitation of profits, and the control of industry in general. Many of these restrictions have, of course, disappeared, and the remainder, which were assumed under war powers, will automatically disappear when peace is finally signed; but the experience during the war has accelerated the general tendency towards government supervision of industry which has been developing during the past generation.

The demand for a permanent policy of regulation of industry is especially evident in connection with the packing industry. Since the signing of the armistice there have already been introduced into both Houses of Congress bills providing for the regulation of this industry. These bills confer upon the government the most radical powers of control and even profit and price regulation, and have been receiving serious consideration in the form of hearings before the House Committee on Interstate and Foreign Commerce and a Sub-Committee of the Senate Committee on Agriculture and Forestry.

Although these bills apply to the packing industry, they are of interest to every business man in America, because if Congress should adopt the principles involved with respect to the packing industry, there is no reason why they should not be extended to cover any other industry and trade in the country. Although the proposed legislation can never pass in its present form, it is worth while for us to consider what these bills mean, because there are many people in the country who believe that this legislation should be passed.

INVESTIGATION AND REPORT OF THE FEDERAL TRADE COMMISSION

During the spring of 1917 the President ordered the Federal Trade Commission to make an investigation of the production and distribution of foodstuffs, and during the early summer of that year the commission began its investigation of the packing industry. This investigation has been going on practically all the time that the United States has been in the war, while the packing industry was making an enviable record of war achievement. Swift & Company, at least, promised hearty coöperation with the Federal Trade Commission and promised to throw open its books and accounts for examination.

Public hearings were held under the direction of a special attorney, who practically placed himself in the position of a prosecuting attorney. Although the packers were at liberty to appear at these hearings, subject to the cross-examination of this attorney, it was definitely announced that the packers would not have the right to cross-examine the witnesses produced by the Federal Trade Commission; that they would not be permitted to cross-examine their own witnesses, nor to produce witnesses to controvert, through cross-examination, the statements made by witnesses produced by the Federal Trade Commission.

The examiners took from the private files in the offices of the packing companies, only such scraps of correspondence as would appear to make out a case against the packers. Oftentimes a single letter would be extracted from a file, whereas other letters and documents in the same file would give an entirely different meaning. Even among the letters taken there were many which would controvert the contentions of the commission.

For example, in Part Two of its report on the packing industry, page 89, the Federal Trade Commission describes the practice known as "wiring on"; it is said that, when a shipper is dissatisfied with the prices offered him in one market, and ships to another, the packer's buyer in the first market wires ahead to the same packer's buyer in the second market, stating the price bid at the first market. The Trade Commission says that, "The packer buyers at the second market bid at prices no greater, and often less, than those offered the shipper at the first market, thus causing him to lose the freight and the shrinkage in the weight of his stock." It is, of course, perfectly legitimate for the buyer in the

first market to wire the buyer of the same company in the second market this information, just as is commonly done in all industries, but the Federal Trade Commission tries to make out that it is an illegitimate practice in the live stock trade. The statement that "The packer buyers at the second market bid at prices no greater, and often less," is false. The Trade Commission introduced in its report copies of letters taken from Swift & Company's files which apparently support this statement; Swift & Company has copies of letters which were also taken by the Trade Commission's examiners, which show instances of higher prices paid for animals in the second market than were paid for them in the first market. These the Federal Trade Commission did not publish in its report.

In pages 132-133-134 of Part II of the report, the Trade Commission charges that the large packers had an agreement fixing the price of lard compound, so that identical prices were charged by all competitors. The inference is, of course, that there was an illegal agreement. The truth of this matter was brought out by Mr. J. Ogden Armour in his testimony before the House Committee on Interstate Commerce in which he explained that the price of lard compound at the time under discussion had been fixed at the request of and in coöperation with the Food Administration as a part of its food control program. In other words, the agreement which forced all dealers to sell at the same price was one brought about by the government itself. The Federal Trade Commission failed to mention this fact, and therefore put the packers in an utterly false light.

The Federal Trade Commission bases its charge that the five big packers have a monopoly primarily on the fact that the percentage of live stock receipts bought at the various markets by each packer remains fairly constant from year to year. To a person outside the industry, this phenomenon appears to be fairly convincing; to a packing-house man, however, it is perfectly evident that the fairly constant percentages are a result of keen competition among the packers. Swift & Company, for example, is so jealous of its position in the market that it has kept a record for years of the percentage of receipts that it has purchased, and compares this with the percentages bought by other packers. This company does not intend to yield ground by even a fraction

of one per cent, if possible, and as a matter of fact has increased its percentage since 1913, according to the Trade Commission's own figures, so that it killed about 90,000 more cattle in 1917 than if it had not increased its percentage.

As evidence that there must be an agreement to divide receipts, the Trade Commission reproduces a letter written by P. D. Armour to his uncle J. Ogden Armour from Denver, referring to the situation there as on a "fifty-fifty basis." This merely meant that Armour was aiming to buy at least 50 per cent of the receipts and that he knew that Swift & Company was naturally aiming to do the same thing, as these are the only two large packers having plants at Denver. The Trade Commission introduced a table of percentages on hog purchases at Denver, because it showed that Swift and Armour had bought nearly equal percentages; but the commission failed to introduce similar tables of percentages on cattle and sheep purchases, which it had in its possession, and which showed that Armour had actually been buying only about 45 per cent of the cattle receipts as compared with Swift's 55 per cent, and that there had been striking variations in the percentages of sheep purchased. The inclusion of these tables would have entirely destroyed the effect which the "fifty-fifty" letter was supposed to create.

In connection with the Federal Trade Commission's failure to establish its contention that the five large packers have an agreement to control purchases, sales or prices, it should be noted that the heads of the large packing companies in printed statements and in their testimony before Congressional committees have made the absolute statement that they have no agreements in restraint of trade of any kind and that they are in open and active competition in the purchase of live stock and in the sale of meats.

The contention of the packers themselves that they are in open and active competition is borne out by many facts which were not mentioned at all by the Federal Trade Commission in its report. Perhaps the most convincing evidence of competition is that the profits of the large packers are so small that they could be wiped out entirely without noticeably affecting prices, and that these profits often turn into losses. During the year ended June 30, 1918, there were 19 out of the 52 weeks in which Swift & Company either made no money at all or actually lost money on beef. The

profit varied from 74 cents per hundred pounds (about three-fourths of a cent a pound) during the week of greatest profit, to a loss of \$1.17 per hundred pounds (over one cent a pound) during the week of greatest loss. It is a pretty poor combination that cannot bring about a more favorable effect on profits. The most convincing evidence that was ever found against such corporations as the Standard Oil Company and the American Sugar Refining Company was that which showed the increasing of profit margins at times and in localities when and where competition was lacking. Such a study, if made of the packing industry, would give evidence of the most severe competition and of the absolute lack of any agreement to control prices.

Many other evidences of competition are also omitted from the Trade Commission's report. For example, it is not mentioned that dealers and speculators always stand ready in every market to buy live stock if the price falls below what the live stock is worth. It is not brought out that the so-called small packers are not only very large in number but that many of them are of very respectable size and that they are flourishing and growing in number. Many of these smaller packers appeared voluntarily before Congressional committees in January, 1919, and surprised members of Congress by telling of the immensity of their business and of the satisfactory conditions prevailing. The Federal Trade Commission does not mention the keen competition that is perfectly evident in the sale of meats; that the different packers have branch houses in the same city, that each has its own corps of salesmen and delivery trucks, and that the retail butchers shop around from the branch house of one packer to the branch house of another, finding differences in price for the same quality of meat. Many other evidences of competition might be cited.

RECOMMENDATIONS OF THE FEDERAL TRADE COMMISSION

The Federal Trade Commission did not recommend that the packing industry itself be taken over and operated by the government, but it assumed that the alleged monopoly was due to the control by the packing concerns of the facilities for transporting and marketing live stock and meats. It therefore urged that live stock cars and refrigerator cars, stock yards and cold storage branch houses, now owned by the packers, be taken

over by the government. In general the net result of such a program would be in no way to take away monopoly power, if such really existed, and would merely dissipate and disorganize marketing facilities which are now operated with highest efficiency, and which it has taken the packers generations to develop.

As for refrigerator cars, these were built by the packers because the railroads refused to furnish this expensive equipment. Each of the large packers has a well-organized transportation department which keeps track of its cars throughout the country, sees that they are moved with the greatest expedition, and that they are distributed through the country in accordance with the needs that vary with live stock receipts and with changes in the demand for meats. Swift & Company, for example, has today only about 80 per cent as many cars as it needs, and nothing could possibly be gained by placing these cars under government operation or even under railroad operation in the way of improving the service to packers and to the public. At the very time that the Federal Trade Commission was coming to its conclusions with regard to refrigerator cars, the Interstate Commerce Commission, after a long and thorough investigation, issued a decision (July 31, 1918) in which it specifically upheld the present system of packer ownership, and said that this system had been of the greatest benefit to the country at large. The Interstate Commerce Commission also found that the packers have been operating their refrigerator cars at a financial loss for several years.

As for the government acquisition of stock yards, it has developed in public hearings in Washington that the packers have become interested in these yards, not only because of the possible financial return, but more especially because of the necessity for furnishing such facilities and efficient operation as would insure an adequate supply of live stock to keep their packing houses operating at full capacity. Swift & Company, at least, is perfectly willing to relinquish its ownership in the stock yards in which it is interested, providing that efficient operation can be continued.

The taking over by the government of the packers' branch houses is manifestly out of the question. These branch houses are practically refrigerated salesrooms, and not freight houses, as contended by the Chairman of the Federal Trade Commission in his testimony before the House Committee on Interstate Com-

merce. Goods have to be kept on hand in large quantities and for indefinite periods and have to be sold and delivered in small quantities every day. It also requires the keenest and most energetic management, as well as ability born of long experience, to operate a branch house successfully, especially as it deals almost entirely in highly perishable goods which have to be moved rapidly.

PROPOSED LEGISLATION

Bills have been introduced into Congress, based on the findings of the Federal Trade Commission, and intended to carry out the recommendations enumerated above. The bill introduced in the House (H. R. 13324, 65th Congress, 3rd Session) by Mr. Sims, on December 10, 1918, provides for government acquisition of live stock and refrigerator cars, stock yards and cold storage branch houses, and also provides for the licensing of packing houses, and gives the government blanket and unrestricted powers to do whatever it sees fit with regard to the packing industry. There is absolutely nothing to justify the singling out of the packing industry for such a remarkable and unprecedented method of control or for such a radical departure from American ideals. The bill even aims specifically to give the government the power to dictate what commodities may or may not be handled by the packers. It also gives the government the power to take away the license and thereby put any concern out of business.

The bill which has received consideration in the Senate (S. 5303, 65th Congress, 3rd Session) was introduced by Mr. Kendrick January 7, 1919. This bill does not go so far in providing for government acquisition of cars, stock yards, and branch houses, but provides for a most drastic system of regulation, under license, with the power to revoke the license at will, and is therefore just as objectionable as the bill introduced into the House. It is absolutely unthinkable that either of these bills can ever be passed in anything like their present forms,—and yet it is of extreme significance that they are receiving serious consideration. The public probably does not realize what a revolutionary thing it would be to pass either of these bills, affecting as they do one of the largest and most vital industries in the country.

The demand for special legislative treatment of the packing industry results from a common belief that there is a combina-

tion in restraint of trade among the five largest packers, and that meat prices are too high or that live stock prices are too low (depending on whether one is a consumer or a farmer), because of the large profits of the packers. No satisfactory legislation can be passed on these assumptions. The large packers are not only in active competition with each other, but with hundreds of smaller packers and local butchers.

The fact that profits amount only to a fraction of a cent per pound of meat absolutely disproves the common belief that profits account for high prices of meat or low prices of live stock. The price received by the packers for meat and by-products is never more than enough to cover the cost of live stock and low operating expenses, and to yield tiny unit profits. Because of large volume of business, these small unit profits, which have practically no effect on prices, yield in the aggregate a satisfactory return on investment. But packers' war profits have not been out of line with profits in other industries; they have been no more than sufficient to finance large inventories at extremely high prices, and they have hardly furnished sufficient protection against the fall in prices, and hence in inventory values, that is sure to come.

Regulation of the Perishable Food Industries After the War

By G. HAROLD POWELL

General Manager, California Fruit Growers' Exchange

SOON after the armistice was signed the license regulations of the Food Administration were gradually abrogated, except as they related to domestic food stuffs in short supply, or to foods that were exported in large volume. The license regulations were designed to eliminate injurious speculation, hoarding, extortionate profits, unfair and wasteful trade practices, and to direct the course of food stuffs in straight lines from producer to consumer through the essential trades without unnecessary cross trading.

The Food Administration created a sentiment among the parties interested that supplemented the powers of the Lever Act. It held conferences with representatives of the trades, appointed advisory committees of the producers and the trades, and appointed trade leaders in the Food Administration to interpret the problems of their industries to the government. By this method a patriotic sentiment for national service was developed on the part of the public at large and particularly among those who were subject to the Food Control Act. It was the policy of the Food Administration, on the signing of the armistice, to relieve the public of war-time restrictions, return the trades to a peace basis at the earliest moment, and, at the same time, protect the public against abnormal rises in prices. The Food Control Act ceases to be effective when the existing state of war between the United States and Germany shall have terminated.

When it was announced that the special license regulations governing the distributors of perishable foods would be abrogated, general regret was voiced by dealers in fruits and vegetables, poultry, dairy products and fish, that the reforms which were introduced into the trades as a war measure should be lost. Notwithstanding the reaction against further governmental interference in business, protests were heard in all parts of the country against a return to peace-time distributing methods, and a sincere inquiry was begun into permanent legislation that might be

enacted for the protection of the producer, the distributor and the public at large against the unfair, wasteful and discriminatory practices that were not uncommon in pre-war times in the transactions of the producer, and of the distributing trades.

Responsive to this sentiment, the California Fruit Growers Exchange, the American Warehousemen Association, and the National League of Commission Merchants have already gone on record in favor of legislation which will make permanent the beneficial ends attained, as a war measure, by the Food Administration. After an experience of eighteen months in handling the Perishable Food Division under Mr. Hoover's direction, and as a representative of one of the largest shippers of perishable foods in the world, the writer is in sympathetic accord with the aims referred to.

FOOD WASTAGE IN PEACE AND WAR TIMES

Before the war there was not always confidence in the fairness of perishable food transactions; the producer distrusted the commission merchant, the dealer complained of the packing and grading by the producer, either party or both may have complained that the implied contracts of sale were not always carried out, and, while disputes between the parties at interest were unadjusted, car loads of fruits and vegetables may have stood on the tracks and been lost through deterioration or at least seriously impaired in quality. There were enough of these disputes in the press to create a prejudice against the perishable food industries and to affect adversely the standing of the honest men in the trade, the average member of which has a standard of integrity in his dealings that will equal that of the men in any other business.

Many of the difficulties in the distribution of perishable foods are inherent in their perishability; that is, the condition of the foods is frequently in dispute on arrival in the markets, and the condition may have been affected by climate or other factors over which no one has control. Others are due to disputes between sellers and buyers over the grade of the food; others to the rejection of cars by the consignees on the score of condition or because the market is lower; others because of carelessness in defining contracts between parties at interest, while some of the trouble is due to unfair and dishonest practices by unscrupulous shippers or

receivers. It was towards the correction of these evils in the perishable food industries that the Food Administration directed its efforts during the war, the license regulations having been drawn after extended conferences with leaders of the different trades, who gave their best efforts in suggesting regulations that would eliminate the abuses, reduce the waste in food stuffs and give greater confidence in perishable food transactions.

The perishable food business is one of quick action. These foods must be sold at just the right time to avoid disaster from poor condition. A delay in the settlement of a dispute between shipper and receiver, the rejection of cars by the purchaser, the holding on track in warm weather before unloading, the lack of ice for refrigeration, the congestion of terminal facilities—all of these factors cause losses in perishable foods, and when added together take an enormous annual toll from our food supplies.

During the war, many of these losses were entirely avoided, or at least were greatly reduced, because the license regulations of the Food Administration forced the quick unloading of perishable foods after arrival in market, the prompt acceptance of cars, or their quick rejection, and the settlement of disputes by arbitration after the cars were accepted. As a result of these regulations, perishable food distribution was freer from abuses than in any pre-war period; the losses were never so small; the disputes between the parties interested were quickly handled; and there was more confidence in the integrity of trade practices than in any former time.

With the abrogation of the license regulations and the ultimate disappearance of the Food Control Act, there will be no practical way of correcting the pre-war trade abuses or dishonest practices or to avoid the waste in food stuffs. Competition again will force dealers to follow practices that are questionable, the public will lose the confidence which it had gained in the integrity of the trades, and the benefits gained through governmental coöperation and supervision will be lost. The resort to the courts for damages against a dishonest dealer is too slow and expensive to be effective. A quicker method of handling disputes and of passing the produce through the avenues of trade is necessary.

I have not definitely formulated my own judgment as to the method of federal supervision or to the extent to which such over-

sight should go. Whether to enact legislation that is mandatory on all distributors and put them under license regulations, or whether to enact a law that gives the distributor the choice of taking out a voluntary license, is a very practical and fundamental question. Theoretically, the public interest would be best served if all shippers and distributors were under a uniform license system and had to conduct their transactions in a similar manner, and I would favor such a plan if the legislation could be enacted. The difficulty in such a plan is, first, to be able to pass such legislation through Congress; and second, the equally practical difficulty of building a government force, with experience and judgment enough to handle the multitude of disputes and problems that need to be decided by sound practical sense. In handling perishable food difficulties, the judgment of the men who come in contact with the trade problems is the factor on which the success or failure of the plan is likely to be decided. No matter how comprehensive or sound the law, its practical working will depend on the fairness and soundness of the acts of the government representatives.

There is a strong reaction in the public mind against further interference in the affairs of business, except as it is necessary to protect the public against flagrant abuses. The trades are antagonistic to the making of detailed reports, to the readjustment of methods of accounting, and to the fear of trouble because of the difficulty of conforming to the requirements of government regulation. There are thousands of members of the trades who have not installed comprehensive methods of accounting, and yet who are successful merchants. To these men governmental regulation, with the accompanying reporting system that has been a part of all regulatory efforts to date, is a veritable nightmare. The average member of the trade is more fearful of the report system than of the effect of regulation. The dishonest man in business is afraid of both.

On the other hand, I am convinced that the government, in coöperation with the parties interested, can work out simple regulations and simple reports that would not be burdensome to the trades, that would in the end prove beneficial and which would protect the trade and the public interest alike. It would make the average man play the game squarely, it would relieve him of

the effect of unfair competition, and it would save millions of dollars worth of food that is now wasted annually.

GOVERNMENTAL SUPERVISION AND VOLUNTARY REGISTRATION

A more practical method of governmental supervision is a voluntary registration of the members of the trade on the declaration by the registrant that he will conform to the regulations of the government after enrollment. Under this plan, the Secretary of Agriculture should be given the power:

1. To facilitate the distribution and marketing of perishable food products and to aid in reducing loss, delay, waste and controversy in their movement and sale; to establish uniform standards for perishable foods shipped in closed packages in interstate and foreign commerce, the use of the standards to depend on the choice of the shipper rather than to be obligatory; the Secretary of Agriculture issuing the standards and the rules and regulations making them effective after consultation with the interested public.

2. To inform the public of practices that are wasteful and unfair, after advising the public, as a result of investigation and of conference, of methods that are economical and fair.

3. To make the adoption of the rules and regulations to prevent wasteful, unfair and discriminatory practices, elective with the parties interested rather than mandatory and to license or register all persons who voluntarily elect to adopt the standards and regulations in their interstate and foreign business. This establishes an honor roll among the members of the trades and this roll is known to all who transact business with shippers or receivers. This voluntary method would also be applicable to intrastate as well as interstate business.

4. To cancel or suspend the registration of any person who violates the conditions of his voluntary enrollment and to publish the cancellation with the reasons for the same. This cancellation would not deprive the person of the right to transact business except under the government standards and rules. It takes him off the honor roll and the public is informed of the reasons.

5. To inspect perishable foods when requested by an enrolled member, and to certify to an allowance from a fixed price on account of deterioration or grade under which a sale has been made; and when both principals to a transaction request an arbitration,

the findings, if not accepted by the parties, shall be *prima facie* evidence in any court as to the allowance made.

I would also have the Secretary of Agriculture appoint permanent committees from the parties interested who could be called by him for advice and suggestion; or who could on their own request appear before the secretary and advise or suggest matters affecting the different industries. And committees should be appointed in each market who would act as advisors to the government representatives in handling trade matters. The war has shown that it is possible to bring about a sympathetic and practical coöperation between the government and the public at large. This relationship should be maintained in peace times. It is equally helpful to those who administer governmental affairs to the parties interested. Coöperation rather than antagonism is needed in governmental and public relationships.

I am convinced that legislation embodying the principles outlined would give to the public the coöperation of the government and the industries in raising the standards of perishable food handling; that it would establish a better standard of public confidence in the transactions of these industries; that it would insure the honest and decent man in business the friendly attitude of the public and protect him against the unscrupulous and dishonest man whose transactions often color public sentiment. Could the parties interested agree that legislation, at least as broad in scope as I have outlined, were in the public interest, I am sure that it would go far in perpetuating the beneficial ends attained by the United States Food Administration as a war emergency. Later on, if more comprehensive legislation is needed it can be built upon the experience of a voluntary system of supervision. The great majority of the trades, I am convinced, would welcome a voluntary system of regulation and would give it their earnest support. The unscrupulous merchant would be advertised to the public, because his name would not appear on the honor roll of the government.

Who Should Fix Resale Prices?¹

By CLAUDIUS TEMPLE MURCHISON

Assistant Professor of Economics, Hunter College, New York City

SHOULD the power to fix resale prices be lodged wholly with the manufacturer, or wholly with the dealer? This seems to state the problem of price maintenance as it is generally thought of in the present controversy. To deny the wisdom of both alternatives in the advocacy of a compromise between the two is the purpose of this paper.

The power of price maintenance is demanded only in connection with goods which are of the identifiable sort, and associated in their resale either with the name of the manufacturer, or with his trade-mark or brand. It would apply only to those commodities which are for the most part distributed through the conventional wholesale-retail channels. Within these limitations would be included probably more than half the volume of the country's retail trade. The majority of grocery commodities, excepting green goods, and the majority of drugs would be included, and smaller but nevertheless impressive proportions of ready made clothing, dress goods, toilet articles, shoes, hardware, jewelry, and novelties. In addition to virtually all of the country's specialty manufacturers, all the retail stores and wholesale houses are vitally concerned as is of course the entire body of the public.

PROBLEM OF PRICE MAINTENANCE

Into this field of such wide and numerous interests, price maintenance has only recently entered as a problem of real importance. Its entrance may be explained as being due to a broadening of the functions of the manufacturers. They formerly were limited to producing commodities and transferring them to commission men or jobbers where they disappeared from sight and interest. Today we often find the manufacturer of specialties attempting to bring within his range of vision and influence not only the wholesale distributors, but also the retailers and ultimate consumers.

¹This discussion is a fragment of a larger work by the author in *Resale Price Maintenance* now being issued by the Columbia University Press.

This broadening of function has been made possible by the vastly improved facilities and methods of advertising and transportation. In some cases it may be said that the manufacturer has reached that point where he combines within himself virtually all the functions of producer and salesman, even though he continues to make use of the jobbers and retailers.

This increasing control by the manufacturer over the destinies of the commodities which he produces has been facilitated by the agency of commodity standardization. The commodity is standardized in every conceivable way. Each unit is a perfect replica of every other unit. To these uniformities of quality, quantity, form, function and carton many manufacturers are adding price uniformity, maintaining that the efficacy of national advertising and the degree of public appreciation is thereby increased. It enables the manufacturer not only to emphasize various utilities, but also to emphasize attractiveness of price. Thus more effectually can a sense of real value be planted in the buyer. Undoubtedly to the great mass of the public there is a strong appeal in the one-price-to-all policy, especially so if there is present a conviction that the one price always commands the utilities desired. As the reputation of a standardized good increases, the price naturally becomes associated in the consumers' minds with the other characteristics which regularly identify the good.

It is asserted that when a commodity reaches this stage where its qualities and price are widely known and associated, it becomes especially subject to the evil of price cutting. The public, having associated for a long time a given commodity with a given price, will immediately detect a lowering of price and so confine their purchases of that commodity to the retailer who has cut the price. The effect is to compel competing retailers to meet the cut or else discontinue handling the commodity. In case there are any exceptions, they carry the good only as a necessary evil and handle it half-heartedly, preferring to offer substitutes where possible. Eventually the price cutters themselves, having exhausted the advertising value of the cut price, will lose interest in the commodity and either drop it or attempt to displace the demand for it by offering substitutes which afford bigger profits.

THE EVILS RESULTING FROM PRICE CUTTING

The evils which are said to result may be summarized as being: First, a decline in the value of the stock owned by dealers who are in the realm of influence exerted by the price cutters; second, a growing reluctance on the part of dealers to handle the commodity, their offering of substitutes, and a consequent decline in sales of the discounted commodity; third, losses suffered by the manufacturer and jobbers through the declining demand from retailers; fourth, inability of the public to secure conveniently the commodity of their choice, accompanied by the necessity of having to accept inferior substitutes.

To prevent price cutting, manufacturers resorted to many devices, the chief of which are: First, the manufacturer grants to such dealers as are willing to maintain the fixed price a liberal rebate on the list price, such rebate payable only when the goods are sold. Any variations from a fixed price entail forfeiture of the rebate. Second, many manufacturers have refused to sell at all to those dealers guilty of cutting prices below the standard. Some have gone so far as not only to refuse to sell to the offending dealer directly, but also to bring pressure to bear on all jobbers and retailers to refuse to supply the offender, thus making it impossible for the price cutter to renew his supplies from any source. Third, prices have been maintained by causing to be incorporated in the contracts of sale special provisions by which the dealers bound themselves to observe a fixed price. Fourth, by making conditional sales in which title to the goods sold to dealers remained in the manufacturer, and passed to the dealers only upon the completion of the resale made at the fixed price. The manufacturer reserved the right to demand the return of all unsold goods, upon the failure of the dealers at any time to maintain the price. Fifth, the use of a license agreement whereby the dealer is regarded merely as an agent or demonstrator without title in the goods. As agent he must sell at a stated price. His profits are in the form of commissions. Sixth, by affixing to the good or its container a statement to the effect that a certain price must be observed, the implication being that the use of such a notice made of the transaction a conditional sale, which bound the dealer to the fixed price. Seventh, a claim on the part of the manufacturer of patented or copyrighted goods

that the usual patent or copyright rights included the right to fix a resale price and to compel the observance thereof.

Virtually all these methods have in whole or in part been adjudged illegal by the supreme court, and in so far as they still exist, they are with very few exceptions merely nominal. Apparently no dependable price maintenance weapon is now available. Moral suasion is slightly efficacious, and the withholding of patronage from price cutters seems under certain very limited conditions to be legal. Yet this is by no means absolutely certain. It seems hopeless to expect the elimination of price cutting in the absence of special federal legislation to that effect.

THE STEVENS BILL AND RESALE PRICE CONTROL

Such legislation has been proposed in the form of the well-known Stevens Bill. Generally stated, its chief provisions are:

1. In any contract for the sale of trade-marked or branded goods the manufacturer may require the observance by dealers of a fixed price, provided that he has not a monopoly of the articles belonging to the same general class of merchandise, that his brand or trade-mark is registered with the Federal Trade Commission, together with the price lists, and that such contract permits a limited number of seasonal or disposal sales (two annually) in case the manufacturer does not choose to repurchase the goods himself on thirty days' notice from the dealer.

2. Emergency circumstances such as bankruptcy, fire, withdrawal from business, commodity deterioration, etc., may justify divergence from price only upon the approval of the manufacturer who demands thirty days' notice of such contemplated action, and who reserves the option to repurchase the goods in case he so desires.

The passage of this bill would clothe the manufacturer with unlimited power of resale price control. To his economic justification of this measure the manufacturer adds an ethical justification. It is argued that any given trade-marked commodity owes its existence to the enterprise and business ability of the producer. Upon it he expends his fortune, his energy, his business reputation. As the market is conquered, and as demand increases, the consumers begin to learn the manufacturer's name and trade-mark. The latter come to be associated with the commodity in the mind of the individual. In proportion to the number of individuals thus affected, the value of the trade-mark grows. It stands as an identification mark by which they may always recognize the

article and select it, rather than accept some competing commodity. If the good will value inhering in this trade-mark is the property exclusively of the manufacturer, and if price cutting by dealers constitutes an exploitation of this property, such an act must be looked upon as being ethically reprehensible.

The manufacturers are joined in their advocacy of the Stevens Bill by many dealers. They see in the device the advantage of greater stability in prices. Sharp price fluctuations eliminated, the perils of merchandising are largely diminished. Competition in that case would become a process involving service and efficiency rather than prices. With the standard price, selling is simplified, and profits are assured. Also the national advertising, financed by the manufacturer and thought to be dependent on the fixed price, is highly valued. Price maintenance would also diminish largely the fears entertained by the great mass of retailers of the growing power of the modern giants in retailing, the chains, department stores, and mail order houses. It is maintained that these largely owe their development, not essentially to economic superiority, but to their command over large capital united with their destructive policy of price cutting. Their price cutting is charged with being reprehensible in motive, being only for the purpose of deceiving the masses into the belief that their prices are uniformly lower than those of their competitors, whereas in fact their prices on unidentified commodities and on private brands which they push as substitutes are not only maintained but in many cases are actually excessive. Thus they recuperate from the losses on standard commodities, and at the same time injure the trade of the average retailers who can neither compete on the standard commodities nor afford to carry private brands.

PRICE CUTTING *v.* PRICE MAINTENANCE

Voices from among the consumers in behalf of price maintenance are not totally lacking. They emphasize the advantages to the consumers to be derived from standard commodities. The manufacturer freed from price cutting perils is in a position to offer better quality and is even enabled to enjoy economies which will encourage general and uniform price decreases. Furthermore they oppose the practice which imperils the life of commodities prized by the public.

The opponents of price maintenance make an issue of the truth of the above assertions and arguments. They deny that price cutting has the disastrous effects claimed, and assert that it is resorted to for the most part because of sound business reasons. As proof of this they are able to indicate numerous commodities, the popularity and distribution of which have rapidly increased rather than diminished despite their subjection to general and persistent price cutting. They attribute the disappearance of certain commodities from the market and the embarrassments of certain manufacturers, not to price cutting, but to inferiority of values offered, or to general inefficiency. They maintain that the existence of superior efficiency which is creative of economies in operating expenditures, and the presence of low cost conditions, constitute not only a valid defense of price cutting but also a moral insistence upon it.

To the claim that price cutting is an exploitation of the good will of the manufacturer, the opponents reply that they too have a good will which is based on a reputation for offering maximum values at minimum prices, and that to protect this good will they should not be prevented from passing to the consumer the benefits of economies achieved by them. They emphasize the fact that they own the goods which they sell, and that in their acquisition they paid the price which the manufacturer demanded. Why should the manufacturer who has received his price and who has given up title to the goods and responsibility in the goods be empowered to dictate to the present owners the conditions of resale?

Furthermore, the opponents of price maintenance profess to see in the use of the fixed price coupled with the enormous amount of advertising which it engenders an unwarranted encroachment on the legitimate functions of the retailer. The retailer is not a mere automaton engaged in the process of breaking up large quantities and distributing them in small units among a ready made clientele. He is a creator of utilities even as the manufacturer. Moreover recent phenomenal developments in merchandising would seem to demonstrate that it is no less responsive to applications of skill and judgment, art and science than is manufacturing. As regards capital expenditure, assumption of risk, and perplexing difficulties to be overcome, modern retailing

need not necessarily differ greatly from manufacturing. In no small number of cases these characteristics predominate on the side of the retailer.

Not only would price maintenance be an encroachment upon functions valuable to the public and involving vested interests of vast proportions, but it would bring the entire machinery of commodity distribution virtually within the control of the manufacturing end of industry, an obviously incongruous and dangerous development. The power to fix the resale price carries with it the power to fix dealers' profits. These would be raised or lowered not in accordance with dealers' interests but in harmony with those of the manufacturer. Concerted action on the part of manufacturers well entrenched behind a powerful consumers' demand created by intensive national advertising, could easily make of dealers' profits simply a form of wages, and in addition even dictate the methods and conditions of resale. The old American Tobacco Company methods are sometimes referred to.

The consumers opposing price maintenance would add to the above items the conviction that the fixed price would be tantamount to monopoly price, and that this would lead to a generally increased cost of living. This result would express itself in two ways: 1. Elimination of the present economies which are enjoyed through the patronizing of the cut price stores. 2. The establishment of conditions which would encourage the fixing of prices on a uniformly higher scale than now obtains.

The more one studies the irreconcilable arguments of the supporters and opponents of price maintenance, the more one is convinced that neither side is wholly wrong, nor yet wholly right. Impartial study of available data seems to justify the taking of a middle ground.

DEGREE OF CONTROL OVER RETAIL DISTRIBUTION

Is there economic justification for broadening the manufacturer's functions to include a degree of control over retail distribution where the manufacturer himself does not sell directly to the consumer? Obviously no such right arises from the consideration alone of the merits of his product or trade mark, because these receive their valuation and are paid for in the sale of the goods to the dealer. If such a right exists it must be sought for

not in the presence of certain qualities which the manufacturer has attached to his product, but in any service which the manufacturer may render in aiding the retailer to find a market.

Through different types of advertising such aid is often given. As regards most standardized commodities it is more effective and economical for the producer to advertise than for the dealer. A commodity of small unit value which no dealer could afford to advertise may easily justify the expenditure by the producer of hundreds of thousands in advertising. Equally evident is the fact that many commodities could never be manufactured profitably were it not for the large scale production made possible by wide advertising. These circumstances prevailing, it must be admitted that the manufacturer often rightly possesses an interest in retailing methods, but it does not follow that thereby the importance of the retailer is diminished. His functions have not been displaced or even restricted. They have only been supplemented.

The control then which the manufacturer has earned is one purely of degree. The true price maintenance problem is not "Should the manufacturer have the power of resale price control?" but "*To what extent* should the manufacturer have the power?" An answer indicating the minimum and maximum limits of this extent is, for practical purposes, sufficient.

We have noted that in many cases the manufacturer does actually share in the creation of the consumer demand. To be sure he profits from this. But so does the retailer. For the retailer then to take advantage of a mutually created situation to sell at a price which reacts injuriously upon the manufacturer would seem to constitute an act which the manufacturer should have the power to prevent. The question now becomes, "Does every price which is a cut price react injuriously upon the manufacturer?"

TYPES OF PRICE CUTTING

There are two quite distinct and totally different types of price cutting, the predatory type which for greater exactness we shall term "below cost" price cutting, and "profit yielding" price cutting. The former occurs where the dealer cuts to such a degree as to sacrifice all profits on the article cut. His purpose is to make good the loss by gaining increased patronage. The profit

yielding type occurs where the dealer either as a result of economies created by his own efficiency, or as a result of excessive gross profits allowed by the manufacturer is enabled to cut the price somewhat, but continues to make from it a fair profit. By far the greater part of price cutting is of this type. Nevertheless it has been condemned on the ground that it is only the first step in an epidemic of price cutting. But why should it become an epidemic? Why cannot the practice of price cutting be confined to that type called profit yielding?

Granting for a moment that this can be done, what would be the effect? It would amount to putting a premium on retailing efficiency, and encourage a general diminishing of prices in proportion to such efficiency,—a result highly to be desired by consumers. Among the price cutters themselves could appear no motive eventually to discontinue handling the good, and with respect to their competitors only the inefficient would be adversely affected. Losses to the manufacturer from their disaffection would be more than met by increased demands from the efficient. Yet it does not by any means follow that any given dealer by reason of modified price cutting privileges based on this principle could monopolize the sale of the discounted commodities in his community.

Taking an average competitive district under present conditions, we find the facts supporting this conclusion. On the city block where the author lives are three groceries carrying in general the same brands, but having totally different price schedules. One maintains prices fixed by the manufacturer; the other two cut prices but not uniformly. The maximum price store in this case does the biggest business, as it gives credit accommodations, makes deliveries, and has a selling force which knows how to please customers. Of the other two, one makes deliveries, but restricts its credit giving, and the third belongs to a chain whose slogan is "Cash and Carry." In these three stores prices vary as one would expect them to vary. Any well-known trade-marked food commodity which can be found in one can generally be found in the others. Yet a price variation in that particular commodity causes not the slightest dislocation in their respective businesses. How ludicrous it would be to insist on absolute uniformity of price in these stores, even though they are less than a stone's throw apart!

PREDATORY PRICE CUTTING SHOULD BE PROHIBITED

It seems safe to state that as a rule no evil can come to the manufacturer from price cutting provided it is not of the predatory type. The power to prohibit the latter should be granted, but with respect to the former no such power should be granted. Not only is it not needed for the manufacturer's protection, but it would lead to positive evils:

1. It would prevent the utilization of any means external to the manufacturer himself by which prices might be lowered. It ignores the various economic conditions in which different retailers are placed, and also the fact that retailers are not the same in business ability, nor are their business opportunities the same. It fails to take account of the varying costs of operation resulting from such dissimilarities. And reliable data prove that cost variation is not confined within narrow limits, but extremely wide ones,—from 10 per cent to 30 per cent.

2. With respect to service involved in retailing, the uniform price fails to take note that some stores are forced by their clientele to furnish prompt and expensive delivery service, are required to give expensive credit accommodations, and to provide costly and elaborate quarters and apparatus for the gratification of their customers. Obviously such stores should be allowed a higher price than the unpretentious establishment in poor and meagre quarters, affording no accommodation whatever, either by way of credit, or delivery, or floor service.

3. It fails to take note of the widely variant transportation charges which the goods have to meet. In the case of long distance transportation of heavy goods, the freight charges would constitute a very large item of expense. Price maintenance would compel all customers to bear the charge proportionally, regardless of their location, and as the territory of distribution widened, the price would come to include a virtual rebate to the more distant consumers at the expense of the others.

4. Unmodified price maintenance would tend to make more easy the attainment without economic justification of virtual monopoly on the part of manufacturers.

It is claimed that all specialty manufacturers would continue to meet competition, that the rivalry between brands and trade-marks cannot be affected by price maintenance. "Why," say

they, "should competition between Ivory Soap and Fairy Soap be any the less with both subject to the fixed price?" The reply is that there is in price maintenance nothing inherently opposed to manufacturers' competition, but admission of this point does not refute the equally evident fact that price maintenance, while not preventing competition, does create conditions which discourage competition. Placing unquestioned responsibility on the manufacturer to fix not only his price to the jobber, but the price to the retailer and the consumer would so simplify the attainment of a combination or agreement that one of a most informal nature between two or three men would in many cases suffice for its realization. The motive for such an agreement between powerful competitors would be ever present. To place this motive within such easy reach of its incarnation would not in the long run be conducive to the best interests either of the public or of the majority of producers. Such a conviction is strengthened by the consideration that price maintenance has advantages only for the manufacturer whose commodity is already well established in the market, as the predatory price cutting is found only in connection with widely known goods. Paradoxical as it may seem, it is not only of value merely to the strong, but what is equally distinctive its value increases in a progressive ratio as the reputation of the producer increases. Price maintenance in the hands of an individual or a group dominant in the market by the power which it affords over retailing conditions gives to its owner an added advantage disproportionate to the justified economic advantage.

5. Further it must be objected that price maintenance donates to the manufacturers full powers over the distributors, but fails to provide for any material restriction of the manufacturers themselves. Not yet can it be said that all virtue resides in the manufacturers, and all vice in the dealers, nor can it be logically maintained that economic forces can be depended upon to govern the producers while the same forces fail utterly in the proper governance of the dealers.

6. One of the gravest objections to be brought against unmodified price maintenance is that it would tend to crystallize the distributive system and make practically impossible any changes that might lessen the cost of distribution. The present "spread"

between producer's cost and consumer's cost is too large. That fact is a matter of grave concern, and innovations aimed at its reduction should not be discouraged. Perhaps the chains, the mail order houses, the department stores, the coöperative associations, and the buying exchanges will contribute somewhat to the solution of the problem. Price maintenance aims a blow at all of them. It is difficult to see how it would fail to oppose every tendency toward transforming the present distributive system or reducing the costs thereof, unless such tendency emanated from the producers or especially favored their interests.

A modified form of price maintenance which is opposed only to the predatory type of price cutting, which permits price variations within the definite limits of cost variations, meets none of the above objections, and as has already been briefly indicated would be productive of positive benefits. It might be attained by placing in the hands of the manufacturer power legally to prohibit the cutting of prices below the margin which covers the cost of handling the commodity in question. A standard form of accounting should be prescribed for all dealers desirous of cutting prices. Upon properly authenticated cost data, periodical classifications of such dealers might be made and minimum schedules of prices arrived at for each class. Rough classifications should also be made of commodities based upon normal differences in rate of turnover, degree of perishability, susceptibility to seasonal demand variations, etc. To each class of dealers should be allotted a corresponding schedule of commodity classifications. In this way both the Scylla of rigid price maintenance and the Charybdis of predatory price cutting may be avoided.

Competition and Combination

By B. M. ANDERSON, JR.

New York City

THE pressure of war emergencies has brought a large part of the world to accept an extreme public control of business and economic activities. So far has this gone in some places and in some industries that it is difficult to distinguish it from state socialism. Public control, involving combination and concentration and systematic organization of industries, has proved more effective during the war than most of us would have anticipated.

The problem is now presented as to whether we shall go back to the old system of competitive free enterprise so essentially congenial to English and American tradition and so well tested in the marvelous development of economic life in England and the United States before the war, or whether, as a result of our war-time experience, we shall seek to preserve a large part of the organization built up by the war. There is a strong sentiment for continuance of the government control of the railroads, and there is a revival of sentiment in favor of large scale industrial combinations subject to government regulation. There is no considerable body of sentiment in favor of the old unregulated monopolistic trusts, but there is considerable sentiment in favor of industrial combinations which shall eliminate competition, and which shall be prevented from injuring the public through regulation by such a body as the Federal Trade Commission. It is worth while, therefore, to reëxamine the factors involved in the competitive system, and to see whether the arguments, which English and American economists have commonly offered in favor of competition, retain their validity under present day conditions.

BUSINESS PROFITS AND SOCIAL WELFARE

It will help to get the matter before us if we consider some of the claims made by the defenders of unregulated monopoly at an earlier period in our history, and particularly the claims presented in the once popular prospectuses of the trust promoters. We shall analyze these claims from two points of view; (a) From the stand-

point of the men inside the combination, and (b) from the general social point of view, or the point of view of the country as a whole. In general, under competitive conditions, whatever makes for business profits makes also for the welfare of the country. The successful business man, who is playing the game fairly, is successful because he creates wealth, and creates wealth more efficiently than other men can do it. Where we have monopolistic combination it still remains true at points that business profits are a mark of social service, but at other points this is clearly not the case. In what follows we shall undertake to see how far the interests of the monopolistic combination and the general public are alike or are divergent.

In considering this, we must distinguish sharply the advantages of large scale production from those of combination as such—technical bigness in a given plant is one thing, while the financial consolidation of many big plants is a different thing. A list of the advantages claimed by the trust “promoter” follows:

1. Power over prices; power to raise prices and to keep them steady.

2. Power over labor; power to control unions and to prevent strikes.

3. Power over jobbers and other middlemen; power to compel them to pay promptly; power to refuse to allow their claims for shortages and damaged goods, etc.

4. Power over the producer of raw material (sometimes stated simply as the ability to buy more cheaply because buying in larger quantities).

I assume that little question will be raised but that virtually all these advantages of combination are socially disadvantageous, and it may be assumed that in any new movement of combination under government regulation, the effort will be made to curb the power of combinations at these points. Some question may be raised as to whether the monopolist's power to keep prices steady is a bad thing, although clearly the power to hold up prices in a period of depression is undesirable, since one important factor in relieving depression is such a decline in prices that new buying is called forth.

Concession must be made, too, to the principle that there is

social economy in wholesale buying (item 4 in the list) in so far as it comes from eliminating unnecessary handling of the goods. Of course, where it comes through oppression of the sellers, it is evil. The advantage of wholesale buying is one that does not grow indefinitely. It makes large scale production more advantageous than small scale production, but after a business unit has become large enough to have efficient management and to make purchases on a considerable scale, it does not gain much by further growth, so far as cheap buying is concerned.

To resume the list:

5. The big firm can utilize by-products which are wasted by the small producer.

But this is merely an argument for large scale production. No limit should be placed on the size of the individual plant; but this does not require financial consolidation of many big plants.

6. There is a gain from the integration of different stages in the same line, as, for example, where by combining different stages in the manufacture of steel you are able to put the metal through several processes without allowing it to get cold.

But, pretty obviously, this is again merely an argument for technical bigness of a single organization in a single locality. It means nothing as an argument for combining different plants in different localities. It is, further, in no sense an argument for the combination of *competing* producers in the *same* stage of production.

7. Where you have several competing firms, each will have a few patents covering certain parts of the process of manufacture, while the others will have patents covering other parts of the process. None will be able to use the best methods at all stages of production because of the monopoly by others on the patented processes. If they combine, however, then all plants can use all of the patents.

Plausible at first, this argument, upon analysis, presents curious features. It says in effect: "Monopoly in patents is a bad thing; let us remedy it by getting a monopoly of the whole business!" The logical conclusion of the argument would be the

throwing open of all patents to all producers. It is an argument against the original theory of the patent itself. A patent is useful to its owner only in so far as it gives him a *differential* advantage over rivals who are trying to perform similar services. It presupposes the possibility of competition. If all the producers in a given line are in combination, then the idea, unpatented, would be just as useful as if it were patented. The theory of the patent is, of course, to stimulate invention by giving the inventor a chance at profits from which others are excluded as compensation to him for his risk and trouble as inventor.

Conceding, however, the desirability of having all the producers in a given line make use of all the patents, it by no means follows that combination among them is necessary. The plan of throwing all patents open to all who care to use them upon the payment of a royalty (the same rate to all) to the inventor, would accomplish the end in view equally well, and would leave the spur of competition as a means of forcing into immediate use all really useful inventions. It would further assure the inventor of a real reward when his patent is put into use.

8. Competing firms, it is argued, have large advertising expenses which are counted as part of cost of production, and raise the prices of goods. A monopoly can dispense with much of this advertising. Tremendous figures in dollars and cents are given in connection with this argument, and the implication of a tremendous social waste is seemingly taken for granted.

It may be true that monopolies have to advertise less than competitive firms do and so can save a considerable expense. It is not clearly in evidence, however, that monopolies have refrained from heavy advertising. But granting the theory, it by no means follows that society at large would be saved the sums involved. What competition takes with one hand, it restores with the other. The consumer pays more for the advertised goods; granted for the sake of argument. But he also pays vastly less for newspapers, periodicals, etc. Competition among publishers in expanding their circulations so as to get advertising has compelled them so to reduce the subscription rates to their papers and periodicals that the purchaser often gets them for less than the cost of the paper on which they are printed. The social cost of ad-

vertising is simply the labor of type-setters, the labor of advertising writers, the paper and ink used in printing advertisements, etc.—a vastly smaller cost than the amounts paid for advertising would indicate. And the educational gain that comes from such a wealth of cheap reading matter—making all concessions that any one demands as to the cheap *quality* of much of the reading matter!—is incalculable. Besides, the advertising itself is a real social gain. It stimulates *wants*—and wants are the steam that keeps social progress going. It is as much in the multiplicity and insistence of his wants as in anything else that civilized man is superior to the savage. Advertising, moreover, communicates information. Purchasers and producers do not get together automatically. There is no way by which marketing can be prevented from being an expensive and a difficult matter, requiring the efforts of great numbers of men and the anxious thought and attention of the ablest minds in the industrial world.

9. Combination enables a business to discharge numerous traveling salesmen, and impressive figures have been offered to show how much is thereby saved.

That the combination does save thereby is for the argument's sake admitted, and that there is some social saving, after the discharged salesmen get to work at something else, is also admitted. But it is denied that the social saving is *net* by any means. For the traveling salesman is a dynamic social agent. He spreads ideas; he keeps the trade up to standards; he aids in making the country socially homogeneous; he breaks up provincialism and traditional methods of doing business. He is of special service to young business men in small communities. Moreover, personal solicitation, however costly, is very necessary in many lines of business. This has been strikingly illustrated in the experience of state insurance in Wisconsin.

10. Combinations can save cross-freights, which under a competitive system are likely to occur.

Now it is difficult to determine the extent to which such cross shipments have taken place under the competitive system. The presumption is, of course, that if a New York firm really has goods just as good and cheap as a Chicago firm, it can, with the freight item in its favor, undersell the Chicago firm in the local market,

But the argument that follows applies, whether the amount of cross-freights is large or small. The saving on this point may be big in dollars and cents to the combination; socially considered, it is subject to a substantial discount. The reason is that the railroad business is a business subject to the "law of diminishing costs." Given the expensive roadbed, given the terminals, given the train crews and rolling stock, given the office organization, there is a huge expense, a fixed expense, whether the transportation business done is large or small. A train may run full almost as cheaply as empty. A track may be used twenty times a day almost as cheaply as once a day. Extra business does increase the *variable* expense, but it does not increase that tremendous item in the railroad's bookkeeping, the fixed expense.

This counter argument is, of course, not applicable in a period of war, when the railroads are working at maximum capacity, nor is it applicable in a section where population is dense and railroads normally run at something like full capacity. But in normal times for the great part of the country it is a valid counter argument. The net saving from elimination of cross-freights is only the *variable* expense of the transportation concerned, and not the whole of the freight charges involved.

II. The combination need make no extensions of credit and so gets along with less capital than the separate firms require, thus saving interest.

True, but on the other hand, the jobbers and retailers must then use *more* capital, paying interest for it often at higher rates than the manufacturer charges, so that an even larger interest charge enters into the price that the consumer pays, and there is no social saving of capital.

In general conclusion on this point, it may be said that many of the gains of the combination are clearly socially disadvantageous, representing merely subtractions from the incomes of other elements of society in exact proportion to the monopoly's gain; that many others, in so far as legitimate, come not from combination as such, but merely from large scale production in the single plant; that of those gains which come directly from combination through the elimination of "competitive wastes," virtually all are subject to a substantial discount before they can be reckoned as social gains, and many are socially illusory. Further,

as against these and all similar arguments, are to be put the familiar doctrines of English and American economics as to the stimulating effect of competition, the great mainspring of economic progress, and the fact that, other things equal, size is a handicap, leading to unwieldiness and red tape.

In the argument that has preceded, it has been provisionally conceded that the claims of the trust promoters as to the business gains of combination are valid. But this concession need not be made. It is certainly undemonstrated that any combination has been successful because of its economies alone. The successful trusts have been successful primarily through monopoly which they have secured by means other than the economies of combination, and there are numerous wrecks in the history of trusts in cases where through failure to get monopoly the big combine found itself unable to hold its own with less clumsy competitors. Professor E. S. Meade of the University of Pennsylvania maintains vigorously in the April, 1912, number of the *Journal of Political Economy* that from the angle of business profit itself, the old trust did not make good, and offers detailed statistical evidence for his view.

On the whole, therefore, we conclude that while combination of a technical sort, the combination which makes for large scale production, the combination which makes possible the full utilization of by-products or other technical advantages, may be trusted to go as far as business men care to take it, the public welfare is best served by an avoidance of the financial combination of competing plants, especially when located in different cities, which are engaged in the same stage of production of a given commodity.

FINANCIAL COMBINATION OF WEAK BARGAINERS

Limitations on this doctrine, however, must be admitted. If the unit of production is very small, too small to have satisfactory banking connections, too small to have satisfactory marketing facilities, and too small to have adequate business direction, a certain degree of combination may very well be advantageous. Thus farmers, particularly those engaged in producing perishable products, may well find it desirable to form organizations of sufficient magnitude to enable them to hire a competent business representative and to enable them to ship their products in car-

load lots. It may even be worth their while and of advantage to the community as a whole for such an organization to have representatives of its own in central markets.

Laborers similarly are in general poor bargainers as individuals. Labor organization is essential if laborers are to be able to sell their perishable product, the day's work, on satisfactory terms. With labor organization, something of business ability can be introduced into the marketing of the laborer's product. With the accumulation of reserve funds by the unions, the laborer is placed in a position where he can finance his operations better and need not make a forced sale in an unsatisfactory market.

Such farmers' and laborers' combinations as are here commended need not and should not involve the element of monopoly. An organization of all the producers of fresh vegetables for winter consumption in the country covering Florida, Louisiana, Texas, and other places, might easily become pernicious. An organization of all the laborers of the country might easily become exceedingly tyrannical. In England, organized labor has gained such strength and coherence that it has been able to force upon the industry of England certain exceedingly vicious practices, particularly that of a systematic curtailment of output. Under the pressure of war needs, the English unions temporarily surrendered this practice, but they are now resuming it. We must avoid allowing this principle to go further in American labor organization. Mr. Schwab is giving sound advice to labor here, pointing out that the American business man twenty years ago operated on the same theory, seeking to form monopolistic combinations which would keep prices up by restricting output, but that the American business man has been forced by law, public sentiment, and his own good judgment to surrender these methods. He advises labor that it, too, must eliminate them.

The advantages of financial consolidation to facilitate marketing and to give better credit standing at the banks are limited. In the matter of borrowing, a well organized wholesale dry goods house, with half a million to a million dollars of capital and surplus, can probably borrow as cheaply at the biggest banks of New York as the United States Steel Corporation can. A house with \$100,000 capital might have greater difficulty in establishing a satisfactory New York connection. But size need not go very far in most cases

to give the necessary prestige and stability and business ability which the banker demands.

COMBINATION VS. MIDDLEMAN IN FOREIGN TRADE

Is combination for marketing more necessary in foreign than in domestic trade? The extent to which it is necessary depends very greatly upon the quality and character of the middleman who might be employed in lieu of combination. Commission houses, jobbers and other middlemen provide all the marketing organization which many businesses need. In very many cases indeed, they supply much more satisfactory facilities than a combine could form for itself. Many London commission houses, for example, deal so justly, so uprightly, so intelligently with shippers from the other side of the earth, that those shippers would be ill-advised, as a rule, to establish independent selling agencies in London. So well established is the reputation of these London houses that a shipper in Java or China will regularly "consign" goods to them without prior arrangements. When the goods arrive in London, they will be taken by the London commission houses and sold at once if the market is right, or else made the basis of a loan. The goods may be of uneven quality, in which case the commission house will sort them into different grades, or it may even blend them with products from another country.

Apart from the commission house, there is the "export house." The export house buys and sells on its own account. Such houses may have their own ships as well as their selling agents abroad, and may even engage in banking business as well as in buying and selling commodities. They may have built up through a generation an intimate knowledge of credit conditions in a foreign country which a new combine could not get in a short time. They deal in many commodities, where the combine would deal in only one. They will have facilities for securing return cargos which the combine would lack, and so will have marked advantage over the combine in cheapness of transportation.¹

There is one general consideration which should give us pause in contemplating great combinations, involving many millions of

¹ See the admirable paper by W. P. Goemann on "Coöperative Selling vs. the Middleman in the Upbuilding of our Foreign Commerce," *Economic World*, 1917.

capital, engaging in foreign trade. Individual traders, operating on a moderate scale, are unlikely to lead their governments into political friction with the governments of other countries. If, however, trade is to be organized on a vast scale, with a few great combinations representing England, America, Germany and France, seeking to dominate the various foreign markets, the possibilities of friction are very great. Before the war, England and America largely relied on the merchants' playing a comparatively lone hand, engaging in trade abroad on the same general basis as they engaged in trade at home. Germany, on the other hand, had organized great combinations closely affiliated with the banks and the government whose purposes were as much political as economic, and which indeed often subordinated profit to the prospect of extending German political influence. While this consideration should not lead us to look with disfavor on foreign trade combinations where such combinations clearly serve business ends of a legitimate sort and avoid the effort to secure monopoly, it should still make us cautious. We want a peaceful world after the war.

The Webb Act, authorizing combinations in foreign trade, subject to regulation by the Federal Trade Commission, does not contemplate that such combinations should give American producers monopolistic position in foreign countries. We have no intention of foisting on foreign countries the evils from which we have freed ourselves. None the less, it is probable that the Webb Act would not have been passed but for exaggerated fears of a trade war following German methods after the war, and our complete victory over Germany has removed most of the dangers which the Webb Act was designed to meet. Our Allies, likewise weakened by the war, would not be strong enough to drive us out of foreign markets if they chose, and if we meet them half way in the matter of fair policy in foreign trade, they will have no disposition to do so.

Organization under the new Webb Act has already gone so far that the best public service will consist, perhaps, not in opposing it, but in pointing out certain difficulties which it may encounter and mistakes which it should avoid. It differs from the old combination movement within the country in two important particulars. In the first place, it retains separate management, separate

control, and full competition among the units within the great domestic market. In the second place, though the Webb Act allows combination with respect to marketing of American products in the foreign fields, it still retains a fair field for such American producers as do not care to enter the combine in the foreign field, and it leaves competition between American producers and foreign producers in the foreign field. It amounts practically to a substitution of a producers' selling agency for the independent middleman. It does not involve the elimination of the middleman, if and when he is able to convince the American producer that he can perform services for him more efficiently than can the producers' selling agency. The opinion has been recently expressed by one of the leading export houses that so far as that house is concerned, it welcomes the new combinations, feeling that they will help advertise American products, and feeling sure also that the export house will get a considerable portion of the business even of the new combines.

Where, however, the combines are organized on a vast scale involving practically all the producers in America, their power in the foreign market may become so great that counter-combinations on the part of other countries are readily invited. In particular, it is probable, as seems already to have been the case in one important instance, that foreign combinations of *buyers* may be formed to meet the American combination of *sellers*. Where this is the case, a very significant change in the character of foreign commerce takes place. There is no longer a free, open market in which hundreds of buyers and sellers daily work out flexible adjustments of prices, but rather the determination of prices becomes a matter of semi-diplomatic negotiations between high contracting parties. If both sides are reasonable, this may work out in much the same way that the free competitive market would work out, but there is a grave danger that in critical periods deadlocks may come, leading to prolonged negotiations during which a cessation or great restriction of production and export take place.

On the other hand, where combinations under the Webb Act exist primarily for the purpose of enabling individual American producers to enter unfamiliar fields which they could not enter if obliged to bear the whole marketing and advertising expenses

alone, real good may come from them, and at all events we may watch the new experiment with interest.

WHERE REGULATED MONOPOLY IS INEVITABLE

Monopoly, subject to regulation, is necessary in some cases. Unregulated competition between two parallel railway lines easily leads to a cut-throat competition which ruins one or the other. Unless railroads are fully utilized—a condition which rarely happens except under such unusual conditions as the war has brought about—additional traffic on a given line increases earnings faster than costs, as we have seen. Under these conditions, each road of the two competing parallel lines has a great incentive to steal business away from its competitor and to cut rates and to give rebates in the process. Similarly, the limitation of space in a city street would make it undesirable that there should be parallel competing street car lines. Competing telephone companies in a given city are an unmitigated nuisance. In these and other cases, there is virtually consensus of opinion that monopoly of some kind under regulation is necessary.

MONOPOLY AND SOCIALISM

But it is to be observed that, where monopoly of this kind is established, even under public regulation, a strong political tendency arises for a further step. The movement becomes strong for *public ownership*, as is instanced in connection with the American railroad, telegraph, telephone and cable systems at the present time.

There is a moral to be drawn from this fact by those who believe in the system of private property and free enterprise. Regulation of business by the government easily leads to the demand for further regulation, and finally for public ownership. If American business generally should organize into large combinations subject to regulation by the Federal Trade Commission, it would make easier the task of the socialist in his advocacy of the "next step." By and large, the assertion may be safely made that those who oppose socialism must accept competition. Competition is after all a better regulator of business than the Federal Trade Commission. In the special cases instanced above of special public utilities, we reluctantly give it as inadequate or undesirable, but for the general field of business, it is the one sure principle that can promise progress, efficiency, reasonable

prices, and continued freedom from governmental regulation with the danger of ultimate government ownership.

Even for the railroads, the writer is convinced that private enterprise is far preferable to government ownership. In a country whose general spirit is that of competition, we may rely upon enough impetus from the general business field to prevent stagnation in railroading under private monopoly subject to government regulation. The danger of stagnation under government ownership is less easily eliminated. Private enterprise has two great advantages in connection with railroading over public ownership, which must be strongly stressed: (1) The check of the balance sheet. A government can afford to run railroads inefficiently because it can make up the deficits through taxation, but private enterprise cannot. (2) A government railroad is much more exposed to unreasonable demands by labor than is a private railroad. But neither of these points, nor other undoubted evils of government ownership, can make a sufficiently popular appeal to give us certainty that government ownership of railroads can be averted. The writer feels reasonably sure of his generalization that the defenders of private property and free enterprise must cling to the competitive principle as well, or else be unable to make adequate resistance to the socialist. Given competition, the present social order, even with its imperfections, is far better than any system which the socialist might propose to substitute for it.

Competition is a term which is not always understood in the same way. To many critics of the existing social order, competition appears as a dreadful nightmare, a bitter struggle for existence in which the weak and helpless are ruthlessly crowded out. They see in it merely the social manifestation of the Darwinian principle of the "survival of the fittest" of "nature red in tooth and claw." In point of fact, competition is not to be understood apart from what has been termed "the level of competition." Competition may take place with clubs, the stronger savage braining the weaker savage and taking his goods from him, but competition may also take place on a higher plane. A prize fight is a competition, but one subject to rules. The fighter must not hit below the belt, he must not use his teeth or his feet in the contest. Within the limits marked out by the rules, he may

exert himself to the utmost. War and diplomacy represent competitions subject to rules. A general may use heavy guns, as heavy as he can command; his men may shoot accurately; they may use the most powerful explosives; but they may not poison wells or fire upon a flag of truce. A diplomat may bargain shrewdly for his country, but he must not treat a solemn treaty as a scrap of paper. It may indeed be said that the greatest sin against civilization is hitting below the belt, and that the great war which we have just fought through to victory has been fought to vindicate that principle; that Germany, who regarded a solemn treaty as a scrap of paper, who poisoned wells and fired on hospitals, is an outcast against which the whole world has allied itself.

Similarly, in business competition, there is a social, moral and legal level of competition, enforced by trade practices, by public sentiment, and where need be by the law. Handicaps put equally on all competitors constitute a burden to none. If all are prohibited from employing unfair practices, none are handicapped. Unregulated competition may easily lead to sad conditions. Thus in the laundries of New York City some years since, women were working long hours in wet cellars filled with steam. Pneumonia and tuberculosis were frequently found among them. Humane men, employers of these women, asked to better the conditions, correctly replied that they were helpless; that if they incurred the expense necessary to improve the conditions, they would have to raise their prices, and that they could not raise their prices without losing their customers. A solution was found in a new arrangement whereby all were required to improve the conditions and pass on the costs of the improvement to the public. Numerous applications of the principle can be found. The contention that competition should be the regulator does not mean that there is no function for the state or for public opinion or for morality. The level of competition itself must be subject to constant study and correction. But the function of the state in these matters should be largely that of an umpire setting the rules, seeing that they are adhered to, determining the level, but leaving the active business man free to make his own plans and contracts without regulation within the sphere of what is considered legitimate business. As the state goes further than this, it hampers initiative and enterprise, and it paves the way for socialism.

The Sherman Anti-trust Law and Readjustment

By RUSH C. BUTLER

Chairman Federal Trade Committee of the Chamber of Commerce of the United States of America

IN this discussion I hope to make it clear that Congress would be justified at this time in conferring upon a federal administrative agency the power to determine in advance whether any given agreement or combination violates the rule of the Sherman Law. Thus baldly stated the proposal may seem revolutionary. But it is not. It indicates nothing more than the next essential step in the evolution of federal legislation concerning the regulation of competition. Such proposed legislation and control will bring us only half way to the goal of ultimate desire long since attained in England where the rule of law is the same as in the United States, where no regulation is established to administer the law, where violations of the law do not constitute crimes, and where infrequent resort to the courts either by aggrieved persons or by the government conclusively proves that in practical application the law is in furtherance of and not in opposition to the public interest.

What is the rule of the Sherman Law? In effect only this as presently interpreted,—that agreements unreasonably restraining trade are unlawful. English-speaking people can take no exception to a rule of conduct so sound and so traditional. But in the United States the rule has been enacted in a federal statute which provides that violations thereof shall be deemed criminal offenses punishable by fine and imprisonment. No means are anywhere provided for finally determining, until years after any contract has been entered into, whether or not it violates the law.

The courts alone can decide the question. If some years after an agreement has been made the courts hold that it did unreasonably restrain trade, the crime has long since been irretrievably committed. A man knows definitely and certainly in advance that if he does certain things he commits murder and that he thereby becomes liable to the penalties prescribed by the criminal statute. Hence such a statute deters the commission of the

crime of murder and is a wholesome statute. The facts constituting unreasonable restraints of trade have not been and cannot be catalogued. The facts in one case might clearly constitute unreasonable restraint of trade and the same facts in another case might constitute only a reasonable restraint or even no restraint at all. The result of such a state of complicated uncertainty is not only to keep men from violating the law, i.e., from entering into agreements unreasonably restraining trade, but to keep men from entering into any agreements restraining trade even though the restraints be reasonable and therefore lawful. Lawful agreements are commendable. If fear of the law keeps men from entering into lawful contracts the public interest is violated. The Sherman Law is the basis of such fear to a degree that cannot be overstated. It is, therefore, something more than a law—it is a power beyond the law.

It is advisable, if not necessary, to find a way to avoid this extra-legal violation of the public interest. I believe the way is clearly indicated. The legislative policy of Congress of the past few years indicates it; the attitude of our courts and commissions also points the way. The public is sympathetically awaiting remedial legislation. The department of the government charged with the duty of enforcing the law has accepted, by acquiescence at least if not otherwise, the judgment of parties to contracts restraining trade to the effect that their particular contracts were not unreasonable restraints, and it has accordingly instituted no legal proceedings based thereon. Then too we are just emerging from the new experiences forced upon us by the war. We have new viewpoints. We have learned that prices can be fixed, production limited, territory divided, and many other things tending to restrain trade can be done without loss of profit to the manufacturer or merchant, without injury to purchaser or consumer, and without causing either private or public injury.

A brief review of our federal legislative history having to do with the Sherman Law, of the contemporaneous conduct of persons or corporations subject thereto, and of the attitude of the federal authorities charged with the enforcement thereof, will tend to establish the point stated in the opening sentence of this discussion.

THE SHERMAN LAW AND CONTEMPORARY HISTORY

The Sherman Law was enacted in 1890.¹ Its prohibitions are contained in the first three sections. In order to avoid confusion of ideas it should first be stated that up to the year 1911 the law was interpreted by the Supreme Court as making unlawful every contract restraining trade, but that in *Standard Oil Company vs. United States*, 221 U. S. 1, decided May 15, 1911, the court held the law to make unlawful only those contracts resulting in *unreasonable* restraints of trade.

The first case decided by the Supreme Court directly involving the Sherman Law was *United States vs. E. C. Knight Co.*, 156 U. S. 1, decided January 21, 1895, in which the court held that under the facts in the case interstate commerce was not involved.

The second case decided by the Supreme Court was *United States vs. Trans-Missouri Freight Association*, 166 U. S. 290, decided March 22, 1897. In its opinion in this case the court by a divided vote of five to four held: (1) That the act applied to and covered common carriers by railroad, and (2) that the agreement complained of by the government violated the provisions of the act.

¹ For handy reference the Sherman Law is herewith reprinted:

SHERMAN LAW; OR, FEDERAL ANTI-TRUST LAW
(Act of July 2, 1890; 26 Stat. 209)

An Act to protect trade and commerce against unlawful restraints and monopolies.

Section 1. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled. Every contract combination in the form of a trust or otherwise, or conspiracy, in the restraint of trade or commerce among the several States, or with foreign nations, is hereby declared to be illegal. Every person who shall make any such contract or engage in any such combination or conspiracy, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court.

Sec. 2. Every person who shall monopolize, or attempt to monopolize, or combine or conspire with any other person or persons, to monopolize any part of the trade or commerce among the several States, or with foreign nations, shall be deemed guilty of a misdemeanor, and on conviction thereof, shall be punished by fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court.

Sec. 3. Every contract, combination in form of trust or otherwise, or conspiracy, in restraint of trade or commerce in any Territory of the United States or of the District of Columbia, or in restraint of trade or commerce

The agreement referred to was entered into by a number of railway companies operating in western territory. The preamble to the agreement recited that it was entered into "for the purpose of mutual protection by establishing and maintaining reasonable rates, rules and regulations on all freight traffic both through and local." The carriers contended that the statute in declaring illegal *every* agreement in restraint of trade, meant only such agreements as are in *unreasonable restraint of trade*. Answering the contention, the court said:

The term is not of such limited signification. . . . When, therefore, the body of an act pronounces as illegal every contract or combination in restraint of trade or commerce among the several states, etc., the plain and ordinary meaning of such language is not limited to that kind of contract alone which is in unreasonable restraint of trade, but all contracts are included in such language and no exception or limitation can be added without placing in the act that which is omitted by Congress.

Every agreement in restraint of trade, whether the restraint was partial or complete, reasonable or unreasonable, was therefore held unlawful.

In *United States vs. Joint Traffic Association*, 171 U. S. 505, decided October 24, 1898, the Supreme Court sustained its ruling

between any such Territory and another, or between any such Territory or Territories and any State or States or the District of Columbia, or with foreign nations, or between the District of Columbia and any State or States or foreign nations, is hereby declared illegal. Every person who shall make any such contract or engage in any such combination or conspiracy, shall be deemed guilty of a misdemeanor, and, on conviction thereof, shall be punished by a fine not exceeding five thousand dollars, or by imprisonment not exceeding one year, or by both said punishments, in the discretion of the court.

Sec. 4. That several circuit courts of the United States are hereby invested with jurisdiction to prevent and restrain violations of this act; and it shall be the duty of the several district attorneys of the United States, in their respective districts, under the direction of the Attorney General, to institute proceedings in equity to prevent and restrain such violations. Such proceedings may be by way of petition setting forth the case and praying that such violation shall be enjoined or otherwise prohibited. When the parties complained of shall have been duly notified of such petition the court shall proceed, as soon as may be, to the hearing and determination of the case; and pending such petition and before final decree, the court may at any time make such temporary restraining order or prohibition as shall be deemed just in the premises.

Sec. 5. Whenever it shall appear to the court before which any proceeding under section four of this act may be pending, that the ends of justice require

in the *Trans-Missouri* case and held that thirty-one railroad companies, engaged in transportation between Chicago and the Atlantic Coast, which had formed an association and agreed that it should have jurisdiction over their competitive traffic and should fix rates, fares and charges, thereby violated the law.

With these two decisions of the Supreme Court squarely denying the right of interstate common carriers to establish rates and practices by agreement, it is a noteworthy fact that the carriers discontinued the practice only for a brief period if at all. They found that it was practically impossible for them to conduct their business without agreements as to rates and practices. Certainly as early as 1906 the practice of making rates by agreement was again resumed and was continued up to the time the government took control of the railroads in December, 1917. The practice was at no time between 1898 and 1917, so far as I know, challenged either directly or indirectly by the government, except incidentally in one proceeding.

The reason why the Department of Justice failed to proceed against the carriers for rate-making by agreement after the decisions in the *Trans-Missouri* case and the *Joint Traffic* case, and

that other parties should be brought before the court, the court may cause them to be summoned, whether they reside in the district in which the court is held or not; and subpoenas to that end may be served in any district by the marshal thereof.

Sec. 6. Any property owned under any contract or by any combination, or pursuant to any conspiracy (and being the subject thereof) mentioned in section one of this act, and being in the course of transportation from one State to another, or to a foreign country, shall be forfeited to the United States, and may be seized and condemned by like proceedings as those provided by law for the forfeiture, seizure, and condemnation of property imported into the United States contrary to law.

Sec. 7. Any person who shall be injured in his business or property by any other person or corporation by reason of anything forbidden or declared to be unlawful by this act, may sue therefor in any circuit court of the United States in the district in which the defendant resides or is found, without respect to the amount in controversy, and shall recover threefold the damages by him sustained, and the costs of suit, including a reasonable attorney's fee.

Sec. 8. That the word "person," or "persons" wherever used in this act shall be deemed to include corporations and associations existing under or authorized by the laws of either the United States, the laws of any of the Territories, the laws of any State, or the laws of any foreign country.

prior to the Standard Oil case, is unknown, but it would probably not be far from the fact to say that such failure was due to the recognition by the Department of the necessity of such method of rate-making by the carriers, and to the Department's belief that the public interest was best served by failing to prosecute.

Modification of the Law by Acts of Congress

1. The Panama Canal Act, approved March 4, 1913, contained a provision prohibiting a railroad company from having any interest in a competitive water line, but further provided that the Interstate Commerce Commission was empowered to permit the continuation of any such ownership if it found that the water line was being operated in the public interest, was of advantage to the convenience and commerce of the people, and that the continuance of such ownership would not exclude, prevent or reduce competition on the water route. It is doubtful whether Congress had ever before recognized the principle that competition may be entrusted to regulation by an administrative body.

2. The Federal Trade Commission Act of September 26, 1914, declared that unfair methods of competition in commerce were unlawful, established the Federal Trade Commission, and conferred upon it the power to administer the law. There appears in this broad grant of power full and complete recognition by Congress of the principle that competition should not as a matter of right be free, but that it should be restricted and subjected to regulation. The commission was authorized to file a complaint against any person, firm or corporation deemed by it to be using any unfair method of competition if it appeared to the commission that the filing of such a complaint would be in the interest of the public. The commission was not required to deal with unfair methods merely trivial in character or affecting only individual or selfish interests. Its functions were to be exercised only in the regulation of such competition as affected the public. The principle thus recognized by Congress is in effect the same as that recognized by the Supreme Court in the Standard Oil case wherein it was held that contracts that did not unreasonably restrain trade, that is contracts not harmful to the public, were lawful.

While considering the Federal Trade Commission Law it may

be appropriate to observe that the act places no limit upon the power of the Federal Trade Commission to determine as a matter of fact what is and what is not an unfair method of competition. The standard established by the Federal Trade Commission Act is no broader, however, than the standards established in Sections 1 and 3 of the Act to Regulate Commerce, declaring that all rates must be reasonable and not unduly prejudicial. The broader the standard, the less the difficulty of administration. In these two laws as well as in many others Congress has recognized the difficulty of limitation and definition. No catalog of specific acts could possibly be made which would clearly define either an unfair method of competition, a just and reasonable rate, or an unjust discrimination.

3. The Clayton Law, approved October 15, 1914, is defined in Section 1 thereof to be an anti-trust law. It establishes standards in that it declares to be unlawful:

- (a) Price discrimination;
- (b) Tying contracts; that is, sales agreements made with the understanding that the purchaser shall not use the goods, wares or merchandise of a competitor;
- (c) Stock ownership of one corporation in another;
- (d) Interlocking of directors.

Again in the Clayton Law the public interest is emphasized, for its prohibitions apply only in cases where the things forbidden would restrain commerce or tend to create a monopoly.

Authority to enforce compliance with the provisions of this law is vested in the Interstate Commerce Commission where applicable to common carriers; in the Federal Reserve Board where applicable to banks; and in the Federal Trade Commission where applicable to all other branches of commerce.

In addition to establishing these standards, the Clayton Law amends the Sherman Law in that it declares (Section 6):

That the labor of a human being is not a commodity or article of commerce. Nothing contained in the anti-trust laws shall be construed to forbid the existence and operation of labor, agricultural, or horticultural organizations, instituted for the purposes of mutual help, and not having capital stock or conducted for a profit, or to forbid or restrain individual members of such organizations from lawfully carrying out the legitimate objects thereof; nor shall such organizations, or the members thereof, be held or construed to be illegal combinations or conspiracies in restraint of trade, under the anti-trust laws.

4. The Sundry Civil Appropriations Act, effective July 1, 1916, making appropriations for governmental expenses, contains the following provision with reference to appropriations for the Department of Justice in the enforcement of the anti-trust laws:

Provided, however, that no part of this money shall be spent in the prosecution of any organization or individual for entering into any combination or agreement having in view the increasing of wages, shortening of hours or bettering the conditions of labor, or for any act done in furtherance thereof, not in itself unlawful: provided further, that no part of this appropriation shall be expended for the prosecution of producers of farm products and associations of farmers who coöperate and organize in an effort to and for the purpose to obtain and maintain a fair and reasonable price for their products.

It is understood that the same provision has been carried in each subsequent sundry civil bill making the same appropriation carried in all appropriation bills. The apparent purpose of this legislation is to grant still further exemption of labor from the provisions penal and otherwise of the Sherman Law. Congress would no doubt justify this exemption on the ground that it was in the public interest. This provision also goes so far as to *recognize the validity of agreements made by farmers for the purpose of obtaining and maintaining fair and reasonable prices for their products*. Here Congress recognizes that it is in the public interest that producers be permitted to obtain *fair and reasonable prices* for the things produced,—or to state it conversely, that it is against the public interest for a person to sell his products at less than fair and reasonable prices. It is to be noted, however, that coöperation among farmers directed toward obtaining and maintaining prices that are higher than fair and reasonable prices is not exempted from the provisions of the Sherman Law.

5. By amendment to the Federal Reserve Act, September 7, 1916, national banks were given authority, subject to regulation by the Federal Reserve Board, to coöperate with each other in conducting banking business in foreign countries.

6. Effective the same date, the Shipping Board Act authorized American steamship lines to enter into such agreements fixing rates or restricting competition, as are approved by the Shipping Board and found by it not to be in violation of the standard established by the act,—that is, not to operate to the detriment of American commerce.

7. The Webb-Pomerene Act, approved April 10, 1918, exempts from the provisions of the Sherman Law contracts, agreements or combinations among persons or corporations doing business in the United States for the purpose of conducting export business only. This act specifically states that its provisions must not be used "artificially or intentionally" to affect domestic business. It also confers jurisdiction upon the Federal Trade Commission to supervise the conduct of export associations and their members, and applies the rule against unfair methods of competition to the conduct of export associations as related to American competitors in foreign markets. The Webb-Pomerene Law directly repeals the Sherman Law in so far as export business is concerned.

8. The United States in assuming control of the railroads accomplished one main purpose, viz., the unrestricted interchangeable use of the carriers' facilities. Under the law as it existed prior to the time the government assumed control of the railroads it would have been impossible for the responsible officers of transportation companies to permit the use of their terminal facilities by competitors or to allow diversion of traffic from their own to competitive lines. The Honorable Edgar E. Clark of the Interstate Commerce Commission recently recommended to the Senate Committee on Interstate Commerce the revision of limitations upon united and coöperative activities among common carriers with a view to eliminating wasteful and unduly expensive competition in rates and service. No man in public life is in better position than Mr. Clark to judge of the necessity for such legislation.

It may also be observed that the Department of Commerce in its active readjustment program for lines of general industry is likewise urging that competitors coöperate subject to certain regulation by the Department.

9. One of the provisions of the act of March 21, 1918, to provide for the operation of transportation systems while under federal control reads as follows:

In determining any question concerning any such rates, fares, charges, classifications, regulations, or practices or changes therein, the Interstate Commerce Commission shall give due consideration to the fact that the transportation systems are being operated under a unified and coördinated national control and not in competition.

This provision seems to be another clear congressional recognition of the fact that competition may go to undue ends, and that it is not against the public interest for the carriers while united to make a higher charge for a service rendered than they had previously made under the compulsion of competition.

10. The Income Tax Law, approved September 8, 1916, section 801, provides that it shall be unlawful for any person exporting articles from any foreign country into the United States, under circumstances therein set out, to sell such articles at a price substantially less than the market value thereof, if the object is to destroy or injure an industry in the United States, or to prevent its establishment here, or to restrain or monopolize the trade in such articles in this country. Again we have in this law congressional recognition of the fact that prices may be made so low as to violate the public interest.

11. Another recognition of the same principle is found in the Lever Law, approved August 10, 1917, enacted "to provide further for the national security and defense, by encouraging the production, conserving the supply, and controlling the distribution of food products and fuel." The law provides among other things that:

In fixing maximum prices for producers, the Commission (Federal Trade Commission) shall allow the cost of production including the expense of operation, maintenance, depreciation and depletion, and shall add thereto a just and reasonable profit.

In fixing such prices for dealers the Commission shall allow the cost to the dealer and shall add thereto a just and reasonable sum for his profit in the transaction.

12. The Committee on Merchant Marine and Fisheries of the House of Representatives in a public report has expressed broad views on the general subject. The court in the United States *vs.* Hamburg-American S. S. Line, 216, Federal Reporter 971, said:

The main subject matter of the controversy, viz., the controlling of transportation so as to allot proportionate shares of it to the different defendants who are in the combination, has recently been most exhaustively considered by the standing committee on Merchant Marine and Fisheries under resolutions of the House of Representatives in Congress. It is manifest from its report that the committee had before it substantially the same evidence which is contained in the record in this case. There is nothing to add to the elaborate presentation of all sides of the controversy which will be found in that report, and we find it

most persuasive to the conclusion that, in view of the peculiarities of ocean transportation, the method adopted by the defendants—if purged of its obnoxious feature, the “fighting” ship—is a reasonable one, which, so far from restraining trade, really fosters and protects it, by giving it a stability which insures more satisfactory public service for all concerned. Without this method, or something like it, there would be, in the language of the committee, one or other of two results:

The lines would either engage in rate wars which would mean the elimination of the weak and the survival of the strong, or to avoid a costly struggle they would consolidate through common ownership. Either would mean monopoly fully as effective, and it is believed more so, than can exist by virtue of (this) agreement.

It seems, therefore, that this particular combination comes fairly within the exception to a strictly literal construction of the statute, which is indicated in the Standard Oil and Tobacco cases.

This review of the attitude of Congress during the past few years as to the Sherman Law clearly establishes that the view of Congress as to the public interest has materially broadened; that Congress no longer feels that unrestricted competition is warranted as a governmental policy, and that regulation not only of restraints on competition but of restraints on contracts can well be entrusted to administrative bodies.

Modification of the Sherman Law by War-Time Activities

The creation of the price-fixing committee of the War Industries Board was not specifically authorized by statute but the committee was the outgrowth of the necessities of the situation. Neither was there any law authorizing the fixing of prices on many articles or commodities the prices of which were controlled directly or indirectly by the committee. In very large measure the prices fixed by the committee were determined or suggested by the producers or manufacturers. The government also placed many restrictions upon manufacturers and producers as to sizes, styles, amount of material permitted to be used, as well as limitations upon markets. Due to the controls so set up, the regulation of prices, production and markets was carried out in a manner satisfactory not only to the industries concerned but to the public at large.

In addition to such form of regulation, the government required of various industries as a war measure that they spend vast sums of money on existing plants in additions and improvements and

in the construction and equipment of new plants. It was inevitable that at the close of the war, whenever that event might occur, there would be vast sums of money invested in the various industries affording productive capacity which would not thereafter be needed, and which would almost certainly menace the industrial peace of the nation. That there has been no panic since the signing of the armistice is a tribute to the good sense and sane judgment of the business men of the country. How long they will be able to hold the situation in check cannot be known, but it seems certain that sooner or later the government must act in the public interest, at least to the extent of permitting competitors to agree to restrict production.

SUGGESTED REMEDY FOR SHERMAN LAW EVILS

The remedy here suggested for the evils resulting from the Sherman Law is that Congress authorize an administrative body to determine in advance whether or not agreements between competitors in restraint of trade are or are not lawful. Let us see how such regulation would work in a concrete case. For example, take the coal-mining industry. It is a natural resource industry, and as such is a special care of the state, because it exhausts a supply that can never be replaced or restored. The Lever Law, approved August 10, 1917, was enacted "to provide further for the national security and defense by encouraging the production, conserving the supply, and controlling the distribution of food products and fuel." For twenty-five years prior to the war, with only two or three brief periods of prosperity, the coal industry was in a deplorable condition, due almost entirely to the fact that the capacity of the mines was largely in excess of that required to produce the coal that the people of the country consumed. Great as was that capacity, it was insufficient to meet the war-time demands made by the government upon the industry. Under the stimulation of the Lever Law, inspired by patriotic motives of the highest order, and being fully cognizant of the additional burden they would have to carry after the war as a result of increasing their productive capacity, the coal operators of the country responded to the demand of the President and the United States Fuel Administrator, and increased both capacity and output beyond all figures ever before known, only to find

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themselves today face to face with an economic crisis that cannot be permanently averted without Congressional action. If agreements among competitors fixing prices, curtailing production, and limiting territory in which they may sell their products may be entered into with impunity, the problems of the coal operators and of those interested in many other lines of industry can, with the assistance of the government, be easily solved.

Assume that by authority of Congress coal operators were permitted to enter into agreements in restraint of trade subject to approval by an administrative agency of the government and to regulation by it. Assume that the administrative agency had found a particular agreement to be only in reasonable restraint of trade and therefore approved it in the public interest. Assume further that the agreed prices yielded the operators only a fair and reasonable profit enabling them to pay the miner fair wages and to sell their coal at a cost that was not unreasonable to consumers thereof. And finally assume that the over-capacity of the mines in the absence of the approved agreement would have resulted in irregular running time, unemployment and consequent labor disturbances, cut-throat competition and financial loss to the industry as a whole and irreparable damage to coal-mining communities.

Under these assumptions it is fair to conclude that the following among other results would be accomplished in the public interest if the agreements were permitted by the regulating body to become effective:

1. There would be conservation of natural coal resources. With a fair margin of profit allowed the operator, the temptation to mine coal as cheaply as possible without regard to conservation methods would be largely overcome. I have been reliably informed that one large operating company, knowing that the price of its output as established by the United States Fuel Administration would yield a fair margin of profit, adopted measures of conservation that increased the percentage of realization of the natural resources in the ground from an average 70 per cent thereof mined under pre-war competitive conditions to 82 per cent thereof produced under governmental regulation.

2. Conservation of health and life of the miners would be promoted by the ability to adopt more careful methods of operation and to install modern and improved machinery.

3. Better preparation of coal by cleaning would be insured. Slate, rock and other impurities would be removed at the mine. This would avoid the use of the carriers' transportation facilities to the extent of the bulk and weight so removed, and would tend to relieve car-shortage and would materially decrease transportation charges.

4. Cleaning the coal would also result in greater cleanliness in firing and would reduce the consumers' expense of operation, maintenance and repairs.

5. Greater attention could also be given to preparation of sizes to suit the demands of consumers whose plants are equipped to handle only certain sizes of coal.

6. The profit to the operator would be in the public interest. It is now conceded to be in the interest of the public that goods and products be sold and handled so as to yield a margin of profit. It is considered to be against the public interest to compel or even to permit competitive prices to become so low as to be less than the cost of manufacturing or producing. This principle has been recognized by the Federal Trade Commission in several complaints it has filed. In complaints filed against the manufacturers of mail chutes the only violation of law alleged by the commission is that an unfair method of competition was used by the manufacturers in that they sold and are selling their product "at and for a price which is less than the cost of producing the same."

7. Curtailment of production would not be so handled as to shut down completely any mine desiring to operate, but would equitably distribute the burden of lack of business among the operators.

8. Regulation of production would also permit the seasonable handling and movement of coal, allowing it to move regularly throughout the year, making provisions for storage, regularity of production, distribution and supply.

9. Labor would be afforded regular, if not daily employment, and at living wages.

10. Coal operators working under such governmental regulation would be in position to cooperate with the common carriers serving their mines. This would result in minimizing, if not eliminating, car-shortage periods and congestion of the tracks and facilities of the carriers.

11. The establishment of zones would keep lower grade coals nearer points of production and permit wider and perhaps unlimited movement of special quality coals, such as cannel, smithing, smokeless and anthracite. This would avoid cross-hauling with all its attendant economic evils.

12. The government is obviously interested these days in the substantial prosperity of all lines of industry. It derives the money with which to discharge its vast financial obligations in part from income and excess profits taxes and in part from the sale of bonds. If the coal industry, for example, does not prosper, the government's revenues realized from income taxes paid by coal companies will be small indeed and its revenues from excess profits taxes will be so small as to be negligible. Unless the industry prospers it will have no money with which to buy bonds.

All of the results above enumerated may reasonably be expected to flow from the regulation suggested and are all in the public interest.

The proposed legislation conferring authority upon an administrative body to approve or disapprove in advance agreements in restraint of trade would be in accord with our well-defined legislative policy. The rule of the Sherman Law is not objectionable. Repeal of the criminal provisions of the Sherman Law would be an obvious remedy for its resulting evils, but such amendment would not be in accord with our legislative policy and is therefore not suggested. The administrative body authorized to approve such agreements would naturally be composed of men well versed in business affairs and the laws applicable thereto. Their views concerning questions of public interest would be broad, and could reasonably be expected to be sympathetic. Their decisions could keep abreast of national policy much more easily than could legislative enactment. The facts constituting violations of the law would be made known in advance to all concerned and the extra-legal restraints upon lawful enterprise would disappear. The Federal Trade Commission in the nature of things is the agency to which the suggested authority should be entrusted. Though its jurisdiction would thereby be enlarged, its functions would not be materially changed. The Commission already possesses ample jurisdiction concerning trade practices. Agreements in restraint of trade, whether they be lawful or unlawful,

are so closely related to trade practices that it would be folly to create a new or a different body to administer the proposed new law.

The condition in which business finds itself at the present time is not substantially different than it was when President Wilson addressed Congress, January 20, 1914, recommending the enactment of the Federal Trade Commission Law. The President then said:

And the business men of the country desire something more than that the menace of legal process in these matters be made explicit and intelligible. They desire the advice, the definite guidance and the information which can be supplied by an administrative body, an interstate trade commission.

The opinion of the country would instantly approve of such a commission. It would not wish to see it empowered to make terms with monopoly or in any sort to assume control of business, as if the Government made itself responsible. It demands such a commission only as an indispensable instrument of information and publicity, as a clearing-house for the facts by which both the public mind and the managers of great business undertakings should be guided, and as an instrumentality for doing justice to business where the processes of the courts or the natural forces of correction outside the courts are inadequate to adjust the remedy to the wrong in a way that will meet all the equities and circumstances of the case.

Congress in response to this recommendation of the President enacted the Federal Trade Commission Law and conferred upon the commission thereby created the broad powers herein above referred to.

The language of the President above quoted is equally applicable to existing conditions. Ours is a government of laws and not of men. If the principles upon which our legislative policy is based are sound, men of integrity, ability and vision can be found to administer these laws. The Federal Trade Commission as an institution is in accordance with current legislative policy. It is the judgment of many men whose opinions are entitled to respect that the Federal Trade Commission should be enlarged to not less than nine members, and that upon such enlarged commission Congress would be justified in conferring these additional powers of regulation.

The Advantage of Preventing Unfair Competition through an Administrative Body

By W. H. S. STEVENS, PH.D.

Washington, D. C.

IN a study of the Federal Trade Commission and Clayton Acts made shortly after their passage,¹ the writer, taking a generally favorable view of the legislation, expressed two opinions. The first was that perhaps "the most important power of the commission and the one most likely to make it an important administrative authority was that over unfair competition." The second was to the effect that there was some administrative advantage in preventing unfair methods of competition through the commission with direct and final appeal to the Circuit Court of Appeals instead of leaving the enforcement to the ordinary mechanism of the Department of Justice and the courts. The conclusions thus expressed are, in the light of subsequent events, far from requiring any modification. On the contrary the scope of the commission's work and the results obtained by this body serve to emphasize their correctness and impress upon one the sound wisdom of the legislation which provided for administrative control of unfair methods of competition.

Of the fact that the legislation was needed there can be little or no doubt.² The volume of applications for complaints which has been received by the commission is alone, in all probability, sufficient evidence of this fact.³ If this is not a satisfactory criterion any survey of the character of the complaints issued will convince unprejudiced persons. While this is perhaps not the place for indicating the nature of the methods against which the commis-

¹ Stevens, the Trade Commission Act, *American Economic Review*, December, 1914, Vol. IV, p. 840, the Clayton Act *ibid.* Mch. 15, Vol. V, p. 38.

² Cf. arguments of the writer over legislation on this subject in *Articles on Unfair Competition in Political Science Quarterly*, June and September, 1914, Vol. XXIX, pp. 282 and 460.

³ Up to November 21, 1918, about four years after its creation, the commission had received 876 applications for complaints, a rate of approximately 225 a year. Cf. W. B. Colver, Chairman, Address before the American Specialty Manufacturers' Association, Cleveland, November 21, 1918.

sion has taken action, it may not be inappropriate to enumerate some of them for the benefit of those who may be unfamiliar with the activities of this body in this direction. In the fiscal year ending June 30, 1918, the commission issued 153 complaints covering a wide variety of unfair practices. These included, among others, exclusive contracts, maintenance of resale prices, commercial bribery, threats of patent infringement suits, passing off, misrepresentation, false advertising, accumulative rebates, tying contracts, intimidation of competitors and customers of competitors, inducing cancellation of orders of customers from competitors, bogus independents and manufacturers' guarantees against declines of dealers' stocks.

Assuming, therefore, that the legislation was necessary, any one of at least three methods of procedure might conceivably have been adopted by Congress for the elimination of these abuses. In the first place unfair methods of competition might have been declared unlawful and the injured individual or organization given a private right of action against the offending party, permitting him to sue for an injunction and also for the damages sustained as a result of the alleged unfair acts.

COURT DECISIONS ON UNFAIR COMPETITION

The objections to such a form of procedure are fairly obvious. The most important one, perhaps, is the construction and interpretation which might be placed upon such an act by the courts. Prior to the passing of the Federal Trade Commission Act there was, it should be borne in mind, a considerable body of decisions on the matter of unfair competition. Broadly speaking, such decisions were of two classes, i.e., those rendered under the old common law and those handed down in connection with cases under the Sherman Act. The common law decisions, however, related very largely to such matters as passing off, misrepresentation, etc., and while the course of these decisions, especially in the last ten years, had shown some tendency towards the expansion of this classification, the common law interpretation of unfair competition was, after all, a decidedly restricted one. Following the passage of the Sherman Act the legal significance of unfair competition may be said gradually to have broadened to include a number of methods which were frequently employed by large

and powerful organizations for the purpose of crushing their competitors. Repeatedly the courts of the United States enjoined these practices upon the sound theory that they restrained trade and resulted in monopoly.

The methods thus prohibited by the courts in the Sherman Act cases differ from those forbidden in actions under the old common law perhaps chiefly in the fact that they usually involved no element of moral turpitude. In the old common law cases on unfair competition such factors as fraud, deceit and misrepresentation were present in probably the majority of instances, and in all the balance the invasion of a competitor's legal rights. The acts prohibited under both the common law and Sherman Act rules resulted in injury to competitors, but the bases upon which the methods were prohibited were different. In the old common law cases the element of moral turpitude or the invasion of a competitor's legal rights were in practically all cases responsible for the court's injunction; in the cases under the Sherman Act the fact that the acts resulted in restraint of trade or attempted a monopoly led to the injunctions. In other words, even though it be admitted that a considerable expansion took place in the law of unfair competition in more recent years, doubt may be expressed as to whether, under the decisions of the courts up to the time of the passage of the Federal Trade Commission Act, it would have been possible to have secured a judgment in any court against any practice that did involve at least one of the above mentioned elements, i.e., moral turpitude, the invasion of a competitor's legal rights or restraint of trade and monopoly; and this was probably true even though it might be clearly shown that the method in question adversely affected competitors.

PREVENTION THROUGH PRIVATE RIGHT OF ACTION

The courts, as everybody knows, are somewhat slow to change. They are and should be conservative and for this reason alone, if for no other, the wisdom of simply forbidding unfair methods of competition and leaving to the individual the entire matter of enforcing his rights under such a statute would be open to serious question. The law is a process of evolution. It changes slowly and while it is quite possible to grant that the courts ultimately will develop in all cases a body of law that leaves little to be desired from the standpoint of justice, it requires years, decades and

even centuries at times for this evolution to take place. To have employed the method under discussion for the purpose of preventing unfair methods of competition would have been to run the grave danger of a somewhat narrow and restricted construction of this term which might continue for many years during which the judicial interpretation of the act slowly evolved.

Secondly, under this method of enforcement the matter of construction must necessarily have been left in the hands of a considerable number of courts, either district courts or circuit courts of appeal. Since one court is more conservative or more progressive than another, there is grave probability that no consistent construction of the law would have appeared for some time since each court would arrive at its conclusions independently upon the basis of the facts before it. These facts would vary from district to district and the theories of the parties in the cases involving the same points before different courts would necessarily show the utmost diversity. Because of this situation different courts might arrive at diametrically opposite conclusions in cases involving the same methods and practices. The law as a consequence would in all probability be in a state of considerable confusion for some time in the future.

The third and most important objection to the method of preventing unfair methods of competition through the private right of action lies in the difficulty which the private individual would have in procuring the necessary evidence in a great many cases. The organizations most likely to suffer from unfair practices are the small and weak though often efficient concerns struggling for a market. Many unfair practices involve the most complicated sets of economic facts—costs, profits, margins, stocks on hand, production, sales, prices, etc. The small organization cannot usually command the legal processes necessary to obtain these facts and even if it could, its financial resources are seldom such as to enable it to do so or to secure the legal, economic, accounting and statistical assistance frequently necessary to enable it properly to prepare and present its case before the court. In a good many instances it cannot be doubted that competitors submit to practices which they consider objectionable and unfair simply because they know that it would involve so heavy an expense to contest them without any certainty of their being able to win their cases.

Finally, and by no means the least important consideration against the method of private right of action, is the fact that methods of competition very frequently involve matters of grave public interest which makes desirable affirmative action by the government itself to protect the public interest.

For the reasons enumerated, therefore, it may be greatly doubted that any adequate protection would be afforded to the relatively small organization against the unfair practices of competitors, could injured parties only secure protection against such methods through private right of action⁴. It may therefore be concluded that the results obtainable by the above mentioned method of procedure in unfair method of competition cases would be far from satisfactory.

PREVENTION THROUGH DEPARTMENT OF JUSTICE

A second method of procedure which might conceivably have been attempted for preventing and eliminating unfair methods of competition would have been to turn this whole matter over to the Department of Justice under a method of procedure similar to that employed in handling violations of the Sherman Act. Such an arrangement would undoubtedly possess important advantages as compared with the private right of action in preventing unfair methods of competition.

In the first place the general public interest would be better safeguarded by provision for affirmative governmental action than would be the case were the right of action merely a private matter. Secondly, there would not exist that same lack of adequate protection to small organizations on account of the expense involved in the prosecution of private suits as would obtain where such suits were the sole protection against unfair methods of competition.

⁴ Some indication of the possible lack of effectiveness of the private right of action alone or compared with administrative action may perhaps be obtained by considering the results of the operation of Sections 2 and 3 of the Clayton Act which forbid price discriminations and exclusive and tying arrangements respectively, both of which methods may properly be regarded as unfair methods of competition. The act also gives parties suffering from these methods a private right of action with treble damages for injuries suffered in addition to the authority which the Trade Commission has to prohibit these practices. A very considerable number of complaints have been issued by the commission under these two sections but the proportion of suits which have been brought by individuals are exceedingly few.

Despite these obvious advantages in favor of the method under discussion as compared with the method of enforcement through the individual right of action, many of the same objections as were suggested to the latter course of procedure may also be raised against the former.

The Department of Justice is primarily and in the last analysis a legal organization. It would appear reasonable to expect, therefore, that the construction and interpretation of the term "unfair methods of competition" adopted by such an organization would be very similar to that of the courts. It would also appear not incorrect to assume that the concepts and ideas of this department with reference to this matter would, relatively speaking, enlarge but slowly as the writer has indicated would probably be the case were the construction of this act left entirely in the hands of the courts. Moreover, if as is the case with the Federal Trade Commission Act final decision as to the legality of various practices rested with the Circuit Court of Appeals except upon *certiorari*, there would almost of a certainty exist the same confused state of the law owing to different decisions in different jurisdictions on the same method of competition as would exist were it attempted to prevent unfair competition through the private right of action.

Such a possible conflict in decisions, however, would probably exist to a less extent under enforcement through the department than under prevention by private right of action owing to the fact that one central organization, the Department of Justice, would handle all cases and would presumably be obliged to develop a certain logical theory or theories of this law which would be consistently employed in the preparation and trial of cases in which the department took action. This is an advantage of no little importance in favor of this method as compared with the one previously discussed. At the same time, as already indicated, many of these cases involve numerous economic, accounting and statistical as well as legal principles and facts and even the Department of Justice is not well equipped to handle the first three matters. Moreover, the Department of Justice has no such broad visitorial powers or authority to obtain reports as is possessed by the Federal Trade Commission. These powers enable the latter body before the actual trial of cases to obtain access to correspondence, production, cost, sales, price and other records

both of the party complained of and its competitors and also to require reports covering any material factor not only relating to the business of the party complained of but also the business of its competitors. It is, of course, possible for the department to subpoena witnesses in court, to call for the production of books and papers, etc., etc., but the legal rules in regard to subpoenas are rather strict. A subpoena, in order to be good, must as a rule be reasonably specific; the documents requested must be shown to be relevant and the amount of data required to be produced must be not unreasonable. Subpoenas are not issued for documentary data merely for the purpose of determining whether or not certain evidence is contained therein. In other words, subpoenas issued for the purpose of enabling a "fishing expedition" are not granted by any court.

Without ability to go directly to correspondence files, accounts, records, etc., and to go through them as thoroughly as may be necessary in order to determine the effect of a particular practice or practices, any organization is likely to be greatly handicapped in determining the fairness or unfairness of particular methods. While a certain amount of such work can be done through the use of subpoenas, it is not always possible on account of the technicalities in connection therewith so to draft such subpoenas as to secure the information required. Moreover it frequently requires a broad general grasp of economic principles as well as expert accounting and statistical analysis to determine what facts are to be looked for and where they are to be found and how they should be analyzed,—for in many cases the concerns themselves would be unable to advise either as to what data to obtain or methods of analysis to employ in order to show the effects of certain practices.

All these facts would appear to be against the placing of jurisdiction over unfair competition in the hands of the Department of Justice rather than in those of an administrative body. The fact that the department possesses no force of economic, statistical and accounting experts would seem to argue that there might be a neglect of these economic, statistical and accounting aspects and elements in the determination of unfair methods of competition. The department's lack of broad visitorial powers would inevitably tend to emphasize this possibility for the reason that in the ab-

sence of such powers it, is frequently impossible to obtain the requisite, economic, statistical and accounting facts necessary to prove the effect of various practices upon competitors. Moreover, the inability of the department to require statistical accounting and other reports from concerns not parties to complaints would be certain greatly to handicap it in procuring the best evidence in many cases as to the effect of certain methods.

PREVENTION THROUGH AN ADMINISTRATIVE BODY

The third possible course of procedure that was open to Congress for preventing unfair methods of competition was to do exactly what was actually done, i.e., place the authority to enforce the act in the hands of an administrative body. The Federal Trade Commission Act declares unfair methods of competition to be unlawful and lays upon the Federal Trade Commission the duty of preventing the same.

When the commission believes that an organization is utilizing an unfair method of competition and it appears to it that a proceeding in this respect would be in the interests of the public, the commission issues and serves a complaint stating the charges and giving notice of a hearing at least thirty days after service. The party complained against has the right to appear and show cause why an order should not be entered requiring him to desist from the violation of law charged in the complaint. Any party, upon good cause being shown, may be allowed by the commission to intervene and appear.

If, upon hearing, the commission believes the method of competition in question to be prohibited, it makes a report in writing stating its findings as to the facts, and issues an order to the party complained against ordering him to cease the use of the method in question. The commission may modify or set aside its report or order at any time prior to the filing of the transcript of the record of the hearing with the Circuit Court of Appeals.

In order to enforce the order of the commission it is provided that, if it is not obeyed, the commission may apply to the Circuit Court of Appeals of any circuit where the method in question was used, or the party resides or carries on business, filing the transcript of the record of the proceeding, including testimony. The court then takes jurisdiction, notifies the party, and has full

power to enter a decree affirming, modifying, or setting aside the order of the commission. The findings of the commission *as to the facts, however, are conclusive if supported by testimony*. If either party applies to the court for leave to adduce additional evidence and can show that it is material and that there were good reasons why it was not introduced before the commission, then the court may direct that such additional evidence be taken before the commission. This body may then modify its findings or make new ones, and again file the results with the court (which findings are deemed conclusive if supported by testimony), together with the additional evidence with its recommendations, if any, for the modification or setting aside of its original order.

The judgment and decree of the Circuit Court of Appeals is made final, except that the Supreme Court may review upon *certiorari*. The jurisdiction of the Circuit Court of Appeals to enforce, modify, or set aside the orders of the commission is made exclusive and all such proceedings are given precedence over other cases and are required to be expedited in every way. The order of the commission or the judgment of the court to enforce the same cannot absolve anyone from liability under the anti-trust acts. Any party against whom an order of the commission is made may obtain a review upon an application to the Circuit Court of Appeals to set aside the order.⁴

The advantages of this method of procedure follow logically from the preceding discussion of the disadvantages of preventing unfair competition through the courts, and the Department of Justice and the courts. The first advantage is in the matter of the construction of the act.

ADMINISTRATIVE CONSTRUCTION OF THE ACT

As an administrative body the composition of the commission is likely always to be of such a character as to number among its five members men formerly engaged in different professions, businesses and occupations. There would, therefore, seem to be no particular reason why the commission should be bound by legalistic traditions which might possibly limit the construction of unfair methods of competition in such a way as to confine it to either the old common law interpretation or make it synonymous with

⁴ Federal Trade Commission Act, Sec. 5.

the Sherman Act or both. The interpretation of the statute should undoubtedly be broad enough to cover not only these practices but many more as well.⁶ The old common law rule, as already indicated, was relatively narrow in its application and methods of unfair competition though frequently enjoined in Sherman Act cases could probably never have been so prohibited unless such acts were in connection with a conspiracy, combination or agreement in restraint of trade or were sufficient to amount to an attempt to monopolize, even though competitors might be adversely affected by such methods. As stated, however, the construction of this act can and should extend over a much broader field than that which would be covered by the interpretations mentioned.⁷

Competition is in essence an economic matter in that it is a phenomenon of the economic world. From this standpoint, therefore, there must and should be economic as well as legal criterions for the determination of what constitutes fair and unfair competition. The commission has extraordinarily wide powers of investigation on its own initiative, the authority to examine books, papers and records of corporations and to make copies thereof and to require either annual or special reports of corporations engaged in interstate commerce. In pursuance of its powers it is authorized to make investigations of industry and to report thereon, and in such connection it has upon its staff in addition to its attorneys a large force of highly trained economists, accountants, and statisticians all of whom are available as circumstances may require for the analysis and study of unfair competition and who can at any time be employed for the purpose of conducting investigations into the economic effects of certain practices.

As a result of all these facts the commission should be in better position to lay down and develop sound standards for the operation of the competitive principle and to develop the lines along which the competitive process should be conducted than either the courts, or the Department of Justice and the courts together. It is noteworthy that the conduct of the work of the commission clearly indicates that that body recognizes the importance of the

⁶ Cf. Stevens W. H. S., "Unfair Competition," Chicago, University Press, 1917.

⁷ Cf. also Stevens "Unfair Competition."

economic element in unfair competition. This appears not only in the organization of the commission's staff but also in some of the proceedings begun by it. In the commission's method of handling complaints, all such complaints after investigation go together with the evidence and the reports of the investigators thereon to a board of review. The function of this board is to review this evidence and these reports and make its own report and recommendations thereon to the commission which passes finally upon the cases. Throughout the entire history of the commission the composition of this board has included both economists and lawyers, the chairman in each case being a lawyer.

The so-called Old Dutch Cleanser and Sears Roebuck cases may be used as illustrations of cases in which the commission has apparently recognized the economic element in unfair methods of competition. In the Old Dutch Cleanser case the complaint was directed against the Cudahy Packing Company alleging as an unfair method of competition that the said company maintained resale prices on this product. The commission found:

(16) That the effect of the price fixing aforesaid has been and is: (a) To secure for respondent, The Cudahy Packing Company, on its "Old Dutch Cleanser," the trade of jobbers and other wholesalers, and especially the relatively higher cost and more inefficient jobbers and other wholesalers, constituting the bulk of the jobbing and wholesale trade, and to enlist their active support and cooperation in enlarging the sale of its price-maintained cleanser, to the prejudice of competing manufacturers who do not fix, require, or enforce the maintenance of resale prices upon their cleansers, thereby protecting such jobbers and other wholesalers against the price competition of other jobbers and wholesalers and especially the relatively lower cost and more efficient establishments;

(b) To tend to force manufacturers who do not fix, require or enforce the maintenance of resale prices and who compete with respondents in the sale of powdered cleansers, also to inaugurate and enforce a system of maintenance of resale prices upon their powdered cleansers, in order to offset the preference of jobbers and other wholesalers for respondent's price-maintained cleanser and to enable manufacturers who do not maintain resale prices upon powdered cleansers to compete upon more equal terms with respondent;

(c) To eliminate competition in prices among jobbers and wholesalers handling "Old Dutch Cleanser," thereby interfering with many such jobbers and other wholesalers, and especially the relatively lower cost and more efficient establishments in their sales of such cleanser at such prices as they may deem adequate and as are warranted by their costs, selling efficiency, and existing trade conditions;

(d) To compel the public, or such portion thereof as require or prefer "Old

Dutch Cleanser" to pay prices therefor based on a gross-profit margin fixed, as aforesaid, according to the costs of the relatively higher cost and less efficient establishments, constituting the bulk of the jobbing and wholesale trade, instead of a price based upon the competition of jobbers and other wholesalers with widely varying stock turns, costs, and efficiency.⁸

In the Sears Roebuck case the commission charged the Sears Roebuck Company with false and misleading advertising and with the sale of sugar below cost when such orders for sugar were combined with orders for other goods. The following quotations from the commission's brief in the Circuit Court of Appeals are worthy of note in this connection:

Petitioner has intended to take, and has taken, custom from many of its thousands of retail competitors, solely upon the basis of admitted misrepresentations of its goods, which, as already set forth, were distinctly intended and designed to procure business on the basis of such misrepresentations instead of upon the basis of quality, service and price. The result was inevitably to deprive petitioner's retail competitors of business and to weaken and render less effectual the efficiency of such retail competition from whence it follows that . . . these methods must be regarded as unfair methods of competition . . .

It is submitted to the Court that this combination offer is as frankly violative of the law of fair competition — i.e., a competition in productive and selling efficiency—as are the misrepresentations made by petitioner. In the face of methods of this character, it is impossible for competition to operate freely, bringing about that adjustment in relative strength and position of competing organizations, with consequent benefits to consumers in the form of quality, service and price, which it was the intention and will of society to provide in adopting as the basic theory of business organization, the principle of competition.⁹

It is believed not to be an exaggeration to say that the commission, giving careful consideration to the economic as well as legal aspects of unfair competition and possessed both of extraordinarily broad investigatory powers, and a highly trained staff of lawyers, economists, accountants and statisticians, will in the long run evolve sounder and more adequate criterions for the determination of what constitutes unfair competition than could possibly be developed through any other agency than an administrative body. It is, of course, true that the courts may refuse to follow the commission's construction and interpretation as well as they

⁸ *Annual Report of the Federal Trade Commission, 1918, p. 180.*

⁹ *Sears Roebuck & Co. vs. Federal Trade Commission, Brief and Argument for Respondent, United States Circuit Court of Appeals for the Seventh Circuit, pp. 99, 101.*

might refuse to follow that of the Department of Justice. It may be conceded, however, that there would be no loss in this respect from the employment of commission method as compared with the Department of Justice method. Moreover, as the findings of fact of the commission are conclusive if supported by testimony, and the commission is vested with the power to make orders on the basis of these facts, it is certainly to be presumed that the theories of the commission as to construction and interpretation will be treated with more consideration than would be accorded to the theories of the Department of Justice.

EASY AND EXPEDITIOUS PROCEDURE

Another advantage of the commission's method of enforcement relates to the adequacy of the protection afforded business concerns through this method of procedure. It is, of course, true that the method of procedure through the Department of Justice would eliminate that lack of protection on account of the expense factor which is one of the principal objections to the method of preventing unfair methods through private right of action. And it is also true that the Department of Justice method would protect the general public interest in this matter in a fashion impossible under the private right of action. All these advantages of the Department of Justice method, however, are equally obtainable under the commission method. Any concern that is dissatisfied with the method of competition employed by its competitors may file a complaint with the commission which will investigate the same and, if the facts warrant, will proceed against the manufacturer or other concern using the unfair method in question.

Thus an easy, expeditious and inexpensive (from the standpoint of business organizations) method is provided for the correction of injuries suffered by concerns through such method and the complaint of the small concern will receive as much attention as the complaint of the large. Nor will the former's case fail for lack of funds to employ legal and other expert advice which may be necessary to prove the case, as might well be true were the sole remedy a private right of action in court to secure protection against the methods of competitors. Yet another important advantage of preventing unfair competition through an administrative body like the commission relates to the flexibility of administrative as compared with legal procedure. Where cases are handled by the

Department of Justice and the courts, a long time must frequently elapse before the decision of the matter. Legal procedure is relatively both slow and technical as compared with the action of an administrative body. Moreover, it is possible for an administrative body to call in an entire industry if necessary as was done by the Federal Trade Commission in certain of the commercial bribery cases. Under rules of legal procedure it would probably be impossible in many cases for the Department of Justice to do this. Instead it would probably be necessary to file and try a complete series of separate suits one against each offending party.

ORDERS OF THE COMMISSION AND JUDICIAL REVIEW

There is yet another matter in connection with the administrative enforcement of the act that requires careful consideration. This is the question of how far and to what extent the orders of the commission will become subject to judicial review. This is important from several standpoints but especially so from that of the construction and interpretation of the act. If the orders of the commission are not contested or the commission is not forced to take them before the courts in order to secure their enforcement it follows that the constructions and interpretations of the commission will necessarily constitute the criterions for the determination of unfairness in the great majority of cases. These criterions will thus tend to become the ones recognized by business and the public as determining the fairness or unfairness of particular methods, and gradually they will become firmly established. It has been indicated that the commission, on account of factors previously discussed, is better equipped probably to develop a sound construction and interpretation of the term unfair methods of competition than any other governmental agency except an administrative body of the same character. During the four years since the organization of the commission there have been several indications that the commission's orders are not likely to be frequently contested. In many cases the parties engaged in certain methods of competition such as commercial bribery are only too glad to be rid of such practices and welcome a valid excuse for refusing to continue a system which they or at least the bulk of them dislike and abhor but continue to practice because practically forced to do so by the competition of other

concerns. Secondly many practices complained of, such as passing off and misrepresentation, etc., are not only obviously unfair and uneconomic but are tinged to such an extent with the element of moral turpitude that few concerns have the hardihood to subject them to judicial review. In such cases offending parties are only too glad to take a finding and order without contest, and correct their practices.

The best evidence of the fact that judicial review is unlikely to be called for in more than a small proportion of cases under the administrative method of procedure lies in the record of the cases before the commission. Up to November 21, 1918, 876 applications for complaints had been received by the commission. Of these approximately one-half, 444 to be exact, were dismissed without public notice or knowledge while 213 more were under investigation. In the case of the balance of the applications, 219 in number, complaints were issued. Of this group 124 were disposed of, ten by dismissal, the respondents having made a sufficient defense, and 114 by orders to cease and desist. In 109 out of these 114 cases the orders were issued by and with the consent of the respondent and in the other five cases the action was tried and argued and resulted in the order.¹⁰ In only two cases to date have respondents appealed to the Circuit Court of Appeals against the order of the commission.

These facts lead to two conclusions: First, that certain methods complained against by the commission and against which orders are issued will never be defended by the parties employing them, and the orders of the commission in connection therewith will not become subject to judicial review, and second, that certain methods complained of by the commission will not be defended and no attempt will be made to defend them against the commission's order until orders against such practices have been so often issued and over such a long period of time that the method in question has come to be generally recognized as an unfair method of competition together with the reasons for so regarding it. In these ways and for the reasons mentioned it is believed that the construction of unfair methods of competition by the commission will tend to gradually establish itself in the law of

¹⁰ W. B. Colver, Chairman, Address before the Commission Specialty Manufacturers' Association, Cleveland, November 21, 1918.

the country and that this construction will be more adequate to preserve fair competition than would a construction evolved by any other than an administrative body of a similar character. Probably it is true that the commission would welcome judicial contests of its orders especially in border line cases where it is extremely difficult to determine the question of fairness or unfairness. The affirmative decision of the courts on the commissions orders would immediately set at rest the law on the contested methods, and adverse decisions would enable the commission to ask Congress for legislation to cover the methods thus upheld.

In conclusion, the belief may be expressed that the unprejudiced student of the commission's work will conclude that the commission has done remarkably well and that in a relatively short space of time it has accomplished a great deal in the way of freeing trade and competition from the throttling influence and effects of the numerous uneconomic and vicious practices embraced in unfair methods of competition.

Summary of the Work of the British Engineering Standards Association¹

By C. LEMAISTRE

Secretary, British Engineering Standards Association

THE insistent demand created by the war for the maximum output of manufactured material in the minimum of time has naturally brought to the fore those means by which economy in production can be effected, and in this way standardization in the engineering world has become almost a word to conjure with, but like all good things, it must be taken in moderation, and the standards recommended must, by a process of periodic revision, be kept abreast of invention and progress; otherwise there is the danger of standardization becoming crystallization. It may fairly be said that the primary objects of standardization are to secure interchangeability of parts, to cheapen manufacture by eliminating the waste of time and material entailed in producing a multiplicity of designs for one and the same purpose, and also to expedite delivery and so reduce maintenance charges and stores.

ORGANIZATION AND PRINCIPLES

Seventeen years ago, however, neither the necessity nor the value of work of this character and still less its intimate relation to economy and speed of production were at all generally recognized, and it was to remedy the chaotic state of things then existing in the engineering industry of Great Britain that the late Sir John Wolfe Barry, K.C.B., F.R.S., in 1901 took the initial steps, when he brought the subject to the notice of the Council of the Institution of Civil Engineers, which resulted in the formation of the British Engineering Standards Committee.

From its inception, certain definite principles have governed the work of the committee, amongst which may be placed in the forefront the community of interest of producer and consumer, which is, in fact, the corner stone of the organization. It was also realized that the committee should not be an academical

¹ Reprinted from paper read before the Annual Meeting of The American Society of Mechanical Engineers, 29 West 39th Street, New York, December 3 to 6, 1918.

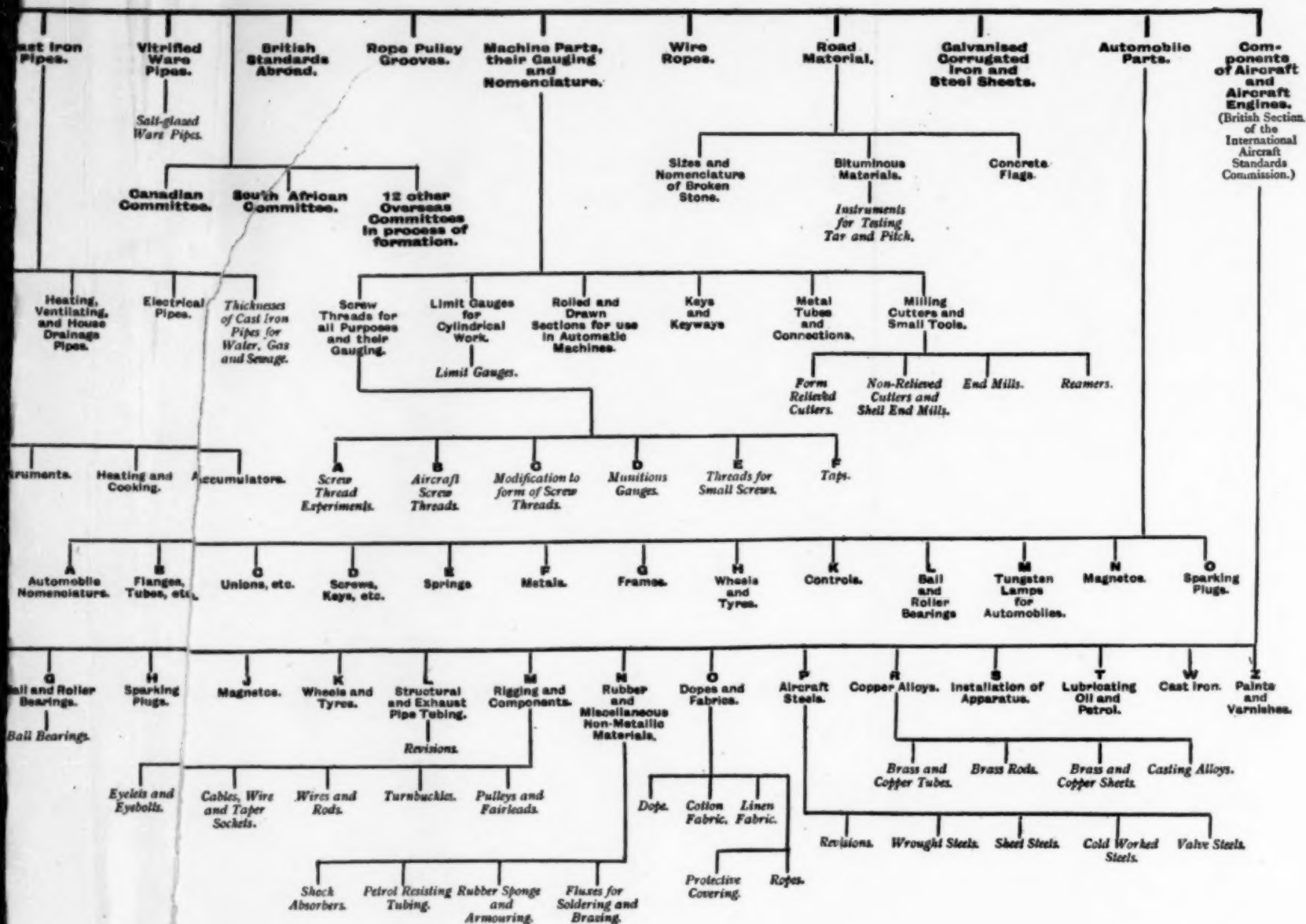
body, but an industrial organization in the closest touch with practical requirements and modern scientific knowledge and discovery; that it should only undertake standardization to meet recognized wants, and then only at the request of the principal interests concerned; that it should confine itself to setting up standards, leaving it to the user to satisfy himself by inspection and supervision that the standards were being adhered to; and, most important of all, that periodic revision of the standards should be undertaken so that improvements might be incorporated, the various industries thus being prevented from becoming stereotyped and their methods hidebound.

From the small nucleus of seven members who formed the original committee, a far-reaching organization has developed with some 160 committees, sub-committees and panels, including in all over 900 members and dealing under one central authority with standards relating to practically the whole field of engineering. Thus for many years past, the British Engineering Standards Association, as it is now called, has provided the neutral ground upon which the producer and the consumer, including the technical officers of the large spending departments of the government and the great classification societies, have met and considered this subject of such vital interest to the well-being of the engineering industry of the country. To the observance of the democratic and progressive principles outlined, coupled with the devoted labor of its members freely giving their time and experience to the work, often at great personal expense and inconvenience, may be attributed the increasing success of this work of growing national importance.

A large number of British standard specifications and reports have already been issued and these are constantly being added to, the most recent addition being the specifications for aircraft material and parts drawn up at the request of the Department of Aircraft Production of the Ministry of Munitions, for whom the association acts practically as the Departmental Specifications Committee.

TYPES OF STANDARDIZATION TAKEN UP BY THE COMMITTEE

The standardization of steel sectional material was the first work taken up by the committee. The British standards for this



material, so important in the construction of ships, bridges and underframes for railway wagons, have had a very wide adoption. The total number of sections is some 175, and the recently formed Mercantile Section of the Admiralty, as a war measure, was able to select from this list a largely reduced number and so put into operation an exceedingly economical measure with but little delay. The testing requirements of Lloyd's Register and the other great classification societies and the Board of Trade have been unified through the work of the committee.

It would appear from the steelmakers' returns for 1913, giving the tonnage of lengths rolled of each section, that 95.7 per cent had been produced by standard rolls and only 4.3 per cent by non-standard rolls, the work thus having proved of immense utility to the steelmakers. In the case of tramway rails, standardization has had the result of reducing to a minimum the sections required; at the present time there are only five standard sections as against over seventy sections prior to the advent of the committee. These sections are now being reduced to three, one being a special section for interurban tramways operating at a higher speed than those of the towns. As a further instance of the benefit of the committee's labors may be mentioned the standard specification for Portland cement, which is practically universally adopted throughout the country.

In regard to the electrical industry, the most important piece of work has been the issue of standardization rules for electrical machinery, in the drafting of which much benefit has accrued through the close and very cordial coöperation of the Standards Committee of the American Institute of Electrical Engineers. A large amount of standardization has been effected also for the automobile industry, especially in regard to the special steels used.

From time to time government departments have called upon the Standards Committee to carry out work for them, as, for instance, in the case of the Ministry of Munitions in relation to the question of screw-thread tolerances and the gauging of screws generally. Then the Indian Government requested the committee to undertake the question of standard designs for locomotives, and these have proved of immense value. The Road Board also asked the committee to draft specifications for road material. As already mentioned, at the request of the Department of Aircraft

Production, the association is dealing with the specifications for aircraft materials and parts as a war measure for the department. To carry on this important work a large number of sub-committees have been formed, consisting of officers from the technical, supply and inspection departments, together with representatives from the various trade organizations concerned; the specifications in this case are not published by the association in the ordinary way, but are issued to the Department of Aircraft Production, by whom they are sent to the various manufacturers of aircraft material on the government list, in this way becoming obligatory.

In regard to the question of finance, the funds for carrying out the work of the committee have been provided by the government and the industries concerned. In 1903 the government included in the estimates a substantial contribution, which was subsequently extended for the years 1904-5-6 by a grant-in-aid equal to the amount contributed by the supporting institutions, manufacturers and others. This was continued on a smaller scale down to 1916, and a further grant on the same condition is being continued to March, 1919. The Indian Government has been a generous supporter of the committee, and the governments of other overseas dominions have also given financial assistance. A liberal response to the committee's appeal for funds has been made by the engineering industry of the country and also by railway, shipping and the other companies, and by some of the local government boards and the tramway and electricity authorities. The expenses of the whole organization up to the war were under £4000 a year, but, owing to the widening of the field of its labors, this amount has been very greatly exceeded.

The committee, as many are aware, has recently become incorporated as an association, under license of the Board of Trade, in order to enable it in the first place to continue the work carried out by the Engineering Standards Committee, viz., to coördinate the efforts of producers and users for the improvement and standardization of engineering materials, and, secondly, in order to secure undisputed legal right to its mark or brand to be attached by manufacturers to their products as a hall-mark of goods made in accordance with the British standard specifications.

The chairman of the association is Sir Archibald Denny, Bart., who succeeded the late Sir John Wolfe Barry, to whose guiding

hand during the many years of his chairmanship, so much of the success of the movement is due. The Main Committee, as the governing committee is called, consists of members nominated by the leading technical institutions, viz., the Institutions of Civil Engineers, Mechanical Engineers, the Iron and Steel Institute, the Naval Architects, and the Institution of Electrical Engineers; there are also two representatives of the Federation of British Industries; and there are three members, not representative of any institution or association, but elected for their eminence in the profession.

The members of the Federation of British Industries give the various trade organizations connected with the work of standardization a direct channel through which to place their views before the main or executive committee of the association.

Rotation of office is provided in that the chairman and vice-chairman and one-third of the group of members retire annually, being eligible for reelection. The Main Committee is the sole executive authority and all specifications and reports are presented to it for final adoption. The procedure before embarking on any new subject is to ascertain by means of a representative conference that there is a volume of opinion favorable to the work being undertaken. If such is the case, the Main Committee nominates the chairman of a sectional committee to take up the work in question, this committee being formed of technical officers representative of the various government departments interested, representatives of the trade organizations concerned, and, lastly, experts in the subject to be dealt with. The Main Committee does not dictate in any way either the number of members or the personnel of the sectional committee, only reserving to itself the right to nominate the chairman, though naturally it is guided in this matter also by the advice of the members.

THE COMMITTEE INTERNATIONAL IN SCOPE

Although the activities of the association have in the main been confined to the home country, a considerable amount of work of an international character has been undertaken. At the present time the association is coöperating with the American Institute of Electrical Engineers in several directions in regard to electrical apparatus generally. Then there is the great question of the

standardization of screw threads and also of milling cutters and small tools, in connection with which the American Society of Mechanical Engineers will be able to render most valuable assistance. Indeed, there is a wide field for Anglo-American agreement on engineering standardization generally and the association looks forward to a large measure of intimate coöperation with this object in view.

In connection also with its labors outside the home country, the association is developing a scheme for assisting in procuring the wider dissemination of British standards, and is undertaking the translation of its more important reports into various foreign languages, as well as setting up, with the assistance of the Overseas Department of the Board of Trade, local committees of British engineers and traders in some of the more important trading centres of the world.

That the value and utility of the work of the association is becoming more and more recognized both at home and abroad is evidenced by the amount of new work it is continually being invited to undertake as well as by the inquiries received from all parts of the world both with reference to the standards and to the organization itself.

The most recent addition to the association's activities is that of the standardization of the details in the construction of ships and their machinery. A conference recently convened at the instance of the Board of Trade, and representing government departments, shipowners, shipbuilders and engineers, classification societies and consulting and naval architects, has unanimously decided to recommend to the Main Committee the setting up of a complete section to deal with this branch of engineering, in which, in common with all others, economic production, fostered by interchangeability of detailed parts, is of such vital importance.

This brief account will, it is hoped, be sufficient to show that throughout the Empire, British standards are receiving increased recognition as being of direct utility to the engineering industry generally. Standardization, after all, is no more and no less than proper coördination. To effect it may necessitate the sinking of much personal opinion, but if its goal, through wideness of outlook and unity of thought and action, is the benefit of the community as a whole, standardization as a coördinated endeavor is bound increasingly to benefit humanity at large.

National Welfare Through Standardized Reports of Industrial Experience

By JOHN W. RIEGEL

University of Pennsylvania

THE majority of American business men prefer to take a chance rather than act on the basis of facts. In many instances experience is never recorded and studied, and its lessons are disregarded.

Shortly after the armistice was signed a representative of the War Department visited a concern to close a contract and pay the actual costs incurred in its performance. The contractor showed him two drawers of papers and told him to go ahead. One drawer was filled with an accumulation of invoices; the other contained cancelled checks. Needless to say, the contractor still awaits a settlement.

Many attempts to set up adequate records fall short of their purpose. The results are characterized by inaccuracy, incompleteness and a lack of serviceability. Probably the figures turned in are derived from unreliable sources,—from memoranda which never are proven with the general books of account. The method of computation may be at fault. Frequently accurate data are presented in a fashion which discourages their study and employment. They are contained in unstandardized reports, which lack the comparative feature, and which are nothing more than a maze of figures.

About two years ago the superintendent of a certain Pennsylvania concern received a statement which showed that in one line of its product the cost of goods sold was twice the ruling market price. This report was allowed to remain on his desk until finally it was forgotten and thrown into the waste basket. Six months later the concern was insolvent. The most elaborate record system is of little value unless it leads to economies and improvements.

Record systems are lacking or they fall short because those in charge of industry do not insist on having something better. Owners and managers must be persuaded to renounce guesswork

control; they must be convinced that their industry or their concern can attain its maximum efficiency only when a true science is built up concerning it.¹

Running business by guess and gamble is a costly process. It results in unwarranted capital investment, with attendant methods of waste; it leads to overexpansion of credit, unprofitable marketing campaigns and periods of depression, with their sharp and painful adjustments throughout the entire economic structure. If production could be attended with less risk, and could be conducted according to sound principles, the nation's economic surplus would be enormously increased. Standardized reports of industrial experience are the basis upon which industrial science can be developed.

STANDARDIZED UNIFORM RECORD SYSTEMS

Standardized uniform record systems are not an innovation. The railroads of the country have been keeping their books according to a prescribed plan for almost a dozen years. It is true, however, that their detailed methods of cost-keeping are still in the process of development. State public service commissions are laying down accounting systems for water companies, for heat, light and power companies and for street railways.² The private industries of the country in a number of instances have taken steps along the same line. Noteworthy progress has been made by the manufacturers of machine tools, furniture, elevators, paper boxes, envelopes, cut glass and shoes. The printing and lithographing houses have been developing uniform methods of recording costs, equipment performance and personal efficiency. Bankers and brokers also have applied the principle of standardization to their records.

It is gratifying to note that this movement was given new impetus at the recent annual convention of the chambers of commerce of the United States, at which a unanimous resolution was passed favoring a system of uniform cost accounting in each industry. This endorsement, by approximately three thousand

¹ The Federal Trade Commission has estimated that 90 per cent of American corporations are without adequate cost data.

² See *Classification of Accounts and Special Forms* published by Bureau of Accounts and Statistics, Pennsylvania Public Service Commission.

men representing all lines of industrial and commercial interests, is a measure of the favor with which American business regards standardization in the matter of records and reports.

The breadth and force of this movement must be increased greatly before the time will be ripe for its application to industry in general. When complete and uniform record keeping is a matter of practice, a foundation of facts concerning our economic life will be available upon which many improvements in national welfare can be built.

SOME OF THE RESULTS THAT MAY BE EXPECTED

(A) *An Index of Efficiency*

American business has been termed inefficient, but no one can say to what degree, or whether it is more inefficient than the business of any other country. Efficiency is a relative term in any case. A widespread conviction exists, however, that there is plenty of room for improvement in the administration of the nation's business. The reason why there are comparatively so few failures under the circumstances is that business is inefficient generally, and the concerns that are on the ragged edge as marginal producers are simply less efficient than the rest, or they are operating under unfavorable conditions beyond which they have little or no control, such as poor location or limited capital.

The significant feature of industrial inefficiency is that not all concerns are lacking in the same respect. One is unusually well-managed in one department; the other is exceptionally strong in another department. The problem before each one is to find its "weak spot," and then take measures to correct the situation there.

The source of inefficiency could be located if composite statistics derived from the entire industry were in the hands of each concern. By comparing its records with the average, each one could discover in what respect it was unusually good or unusually bad. Of course the normal situation could be summarized only from accounts and reports kept and rendered uniformly throughout the industry. A complete composite record, currently calculated for each line of commercial and industrial enterprise, is the real statistical need of business. What the sales or costs were a year ago, compared with what they are at present, and other simi-

lar relationships, do not reflect the weaknesses of the concern as compared with its rivals. These matters are local history. To rely on them is like running a race backwards, with no knowledge of the speed of your opponents.

During the war the Federal Trade Commission compiled average figures of the costs of mining coal in each field where the general conditions of operation were similar. The array of facts which it collected show the possibilities of standardized reports of industrial experience. Suppose the chart covering the Illinois field were published and sent to the operators in that district. It would show that 30 per cent of the coal mined in the field cost x.xx; 50 per cent cost x.xx and 80 per cent cost x.xx; and schedules of component items would accompany the aggregate figures. Each operator could compare his costs with the standard computed from the reports of his business associates. Suppose his expenses were above the average. He could locate the source of excess cost, whether it is a matter of royalties, depreciation, wages, ventilation, drainage or what not.

Costs of production are but one side of the question. The chart also would show the average price received for the coal f. o. b. mine. Each operator could check his gross receipts per ton against the prices realized by the others in the field. The comparison would show the competency of his sales organization.

The extent to which detailed records of equipment performance and other similar memoranda are to be kept, could be prescribed with the assurance that the results would pay for the expense incurred many times over. The beater records in paper mills, the facts of oil consumption on the various divisions and in the several branches of locomotive service on the Louisville and Nashville Railroad, and the location, frequency and cause of breakdowns in pipe lines as recorded by many water companies are typical of the equipment data that can be used to save money.

Records of personal efficiency have a field of unbounded utility. Through them the worker can see his contribution to the product of the plant, watch his progress from day to day, and gauge his worth as compared with that of his fellows. A very optimistic view of records of individual workmanship was expressed by Mr. Robert B. Wolf, whose experience along this line led him to say:

The most democratic industrial plant is the one which permits the fullest amount of individual freedom to each member, irrespective of his position, and, at the same time, is so sensitively adjusted that *it reflects immediately the result of his actions*. If his actions result in injury to others he will see that as a part of the whole, he himself must also suffer. An organization of this kind can never be used by the employer to exploit the employe, for *it will continually be demonstrating to both that the success of any one part of the organization is absolutely dependent upon that of every other part, and therefore upon the success of the whole.*³

There is no intent to convey the impression that a system of records can be evolved which will give ready-to-use formulae that can be applied by a novice to reveal the vital facts of any business or of industry in general. Figures and data must be used by those who understand the conditions underlying their derivation, otherwise the most unwarranted assumptions may be made. For example, a flat comparison of the expenditures and revenues of railroads throughout the United States would be most misleading on account of the different physical and economic regions in which they operate.

Some will say that any situation reflected by statistics can be explained or excused by a party intimately associated with it. This may be so in the first instance, but a constant course of explanation on his part is pretty good evidence of an unsound condition. Moreover his supply of excuses will diminish and detection will become correspondingly easy.

The provision of a "clinical thermometer of industry" through composite statistics will point the way to progress, but it will do nothing of itself. Statistics will aid in the diagnosis, but they will not effect the cure. The management of the concern must apply the proper remedy.

(B) Capital Will Be Directed to Productive Fields

The financial interests of the country will be benefited by standardized reports of industrial experience. The investing public will be furnished with facts concerning the normal realization on investment in many lines. The concern that is not up to the standard can be noted. Dividends alone will no longer be the criterion of value,—assets, liabilities, revenues and expenditures can be intelligently scrutinized. The buyer of securities will have a guide to aid him in the investment of his funds.

³ "The Creative Workman," Technical Ass'n. of Pulp & Paper Industry, New York, 1918, p. 13.

Banks and credit advancing institutions insist upon a financial statement from the borrower before they decide upon the line of credit to be extended to him. Suppose that bankers were provided with figures showing the normal conditions in the industry, —the average relative strength of the several items on its balance sheets and the average earning power of the concerns engaged in it. Decision upon the proper line of credit to allow would be facilitated, risk would be less, other things being equal, interest rates would be lower, and the loss to the public through the misdirection of the flow of capital would be materially lessened. The development of standard business records will also be a means of safeguarding against the contraction of bad debts, since the debtor's statements could be readily analyzed, and his limit of credit decided with assurance.

Where the management of an enterprise is separate from the ownership, as frequently obtains with corporations, the owners could carefully review the work of their administrative agents. Composite data secured from uniform records would be the means of fashioning the strongest sort of a club to wield over the heads of inefficient managers. The ownership would be able to criticize the conduct of the business in the light of the experience and progress of its associates in the same industry.

(C) Facts Will Be Available for the Discussion of Problems of Wealth Distribution

The problems connected with the distribution of wealth are further from solution than those concerned with its creation. Facts about the distributive process will be of the greatest help to those who are trying earnestly to establish more equitable relations between capitalist, manager and wage-earner.

"Profiteering" has been decried over the length and breadth of the land, and the "profiteer," whoever and wherever he may be, has been branded a traitor and a scoundrel. But who is a "profiteer," and just what is "profiteering?" These terms have not been defined, nor can they be until the shares of the surplus wealth taken by each of the groups engaged in production are known. Only then can the public decide what a "fair return" and a "fair wage" is, and who the "profiteers" are. It may develop that those most vehement in their denunciations are not without sullied hands.

If a system of records is used to establish new piece rates which lower the wage for an equivalent amount of work, it will be serving a perverted function. On the other hand, if it is a means of promoting industry, initiative and loyalty, and a device which selects those to receive increased wages and be given places of larger opportunity and responsibility, it will be employed in the best interests of all. The immediate results of a perverted use of uniform records will blind the public to the more or less vague benefits which they promise in the distant future.

Complete and standardized records of industrial experience will be of tremendous value to a board of labor arbitration. The figures will stand for or against the worker according to the way they compare with the general wage level in his industry or in other industries in which the work done is similar to his own. Knowledge of the facts will further a compromise of justice, and will enable the public to voice its approval or disapproval of the award.

While the identity of the individual company was not disclosed, the records of the Federal Trade Commission showed that one operator was charging over a dollar for administrative salaries and expenses per ton of coal mined. Most of the companies were charging under ten cents per ton for this item. A discrepancy so large is unwarranted on its face, and would seem to indicate an abnormal appropriation of the earnings of the mine by its managers. Suppose this were the case, and the wage-earners were suffering in consequence. Would not a board of arbitration have some very good evidence upon which to act?

(D) The Education of the Consumer Along Economic Lines

Information concerning the cost of doing business, the gross return for goods and services sold and the net income to owners, managers and workers will be a means of educating the consumer along economic lines. One of the sources of economic discord in the past has been the consumer's ignorance of the effect of his whims and desires upon the machinery of production. To what extent could the welfare of the nation be promoted if the consumer were educated to approximate his demands in all lines to the available supply as he was in a few respects during the recent food and fuel conservation campaigns?

In seasonal industries production runs at top speed for a period, and then it is discontinued for probably the balance of the year. As a consequence capital and labor are alternately overworked and idle. This condition results in general inefficiency and high prices, not to mention the distress of the workers affected by unemployment. Another opportunity for the conservation of waste through the education of the consumer is to teach him to give increased favor to standardized articles. If the public knows about the problems confronting its business, it can better mitigate the suffering and friction they cause, and coöperate to further their solution.

(E) Improved Public Regulation

Standardized methods of record keeping will promote the intelligent regulation of business. Too frequently our laws along this line have been the result of public indignation, factional agitation or group prejudice. Provision must be made for the collection of facts upon which to base economic legislation in the future.

Statistics derived in a uniform way in each industry and made available to the States can be used along the line of labor legislation, for the prevention of industrial accidents and diseases, the establishment of systems of state insurance and pensions, the treatment of wage disputes and the taking of other measures to further the welfare of the worker. They will aid the States in their regulation of incorporation, their programs of taxation, and promote business regulation which is constructive rather than restrictive in aim.

These figures can be used in building up our tariff schedules in a scientific way. Our federal taxation plans can be revised to apportion the incidence of the burden more equitably upon the several economic groups in the community because their respective abilities to pay will be known more definitely. The regulation of interstate commerce would be facilitated by uniform industrial records, and reasonable and unreasonable restraints of trade could be distinguished more readily. The function of regulation could be made administrative rather than judicial in its operation. If the federal government is to engage in positive assistance, or even own and operate industrial enterprises, let it do so on the basis of facts. Marine insurance and ship subsidy are cases in point.

(F) The Fruits of Industrial Coöperation Can Be Enjoyed

Wasteful duplication of effort, the constant tendency to discord and diminished returns and the lack of coördination which characterize the régime of competition are giving rise to a growing conviction that it is a costly regulator of trade. Coöperation promises many benefits and economies, but it is also fraught with many dangers. It can be permitted only under adequate public regulation; otherwise it might lead to abuses which would violate and stamp out freedom of opportunity; it might lead to the wanton curtailment of service and the arbitrary elevation of prices through monopoly power. Regulation of coöperation should be founded upon uniform records turned in to the regulatory body. It will be recalled that the regulation of the railroads under the act of 1887 was greatly handicapped until the uniform system of accounting was prescribed and adopted under the provisions of the Hepburn Law.

The movement toward industrial coöperation is shown in a concrete manner by the following resolution which also was passed at the recent convention of the chambers of commerce:

The war has demonstrated that through industrial coöperation great economies may be achieved, waste eliminated, and efficiency increased. The nation should not forget, but rather should capitalize these lessons by adapting effective war practices to peace conditions through permitting reasonable coöperations between units of industry under appropriate federal supervision. The conditions incident to the period of readjustment render it imperative that all obstacles to reasonable coöperation be immediately removed through appropriate legislation.

The industries of the country that are progressive are urging coöperation under governmental supervision. To be adequate this supervision should be based on facts, and the business of the coöperating units must be made public, therefore, to a degree which will enable regulation satisfactory to them and to the people at large.

DIFFICULTIES IN THE WAY

The difficulties that confront any agency that undertakes the work of installing a uniform record system are grave indeed. First of all there is the construction of a generally acceptable and workable system,—one that will give accurate results quickly and economically. There is the further problem of securing widespread

adoption of the plan as worked out, and seeing that the orders are followed in letter and spirit by a great number of concerns. The experience recorded would have to be collected and disseminated and be of benefit to the industry and to the public. The reports and advice of the central compiling bureau would have to be recent enough to be news rather than history; the composite figures would have to be taken from businesses operating under the same general conditions and confronted with the same general problems; moreover the periods covered in the reports would have to be of the same duration in order to be comparable.

The Plan Must Await Public Consideration and Approval

Uniformity in record-keeping cannot be installed successfully from above. If this is done the systems will be regarded as burdens,—as more legislative interference. When the majority of American business men concur in the resolutions of the chambers of commerce, the time will be at hand to consider the application of the abstract proposal to have standardized records of industrial experience.

Grading and Standardization in Marketing Foods

By W. F. GEPHART

Washington University, St. Louis, Mo.

THERE has been much discussion recently with respect to the importance of a standard unit of value both for this country and for the great international trading nations. This is important not only because of the bearing that such a changing standard of value has on trading within any single country but also because of the enormous development of international trading. The United States and its products have become such an important factor in the international markets of the world, that we can no longer be indifferent as to standards of value. There are peculiar difficulties to be encountered in arriving at such a standard which would be stable, in a country with such a diversity of industry and area as the United States—not to discuss the added difficulties which are met when exchange among various countries arises.

The standard of value is, like all other standards of measurement, partly a result of law and partly a result of custom. But, since the unit of value must measure all other goods, its real or other goods value and its continual change in this goods value are difficult to express in some one standard or in static, unchanging values.

Then, too, this unit of value or the material of which it is now composed has in itself value in terms of other goods. It satisfied the desire of consumers for other than that of measuring the value of goods; whereas, other measuring units, such as the yard, the bushel or the pound, have in their representatives little actual economic good. If the metals which go to make up the unit of value did not thus have the value in the arts and sciences, it would be easier in using them to arrive at a static or stable measuring unit of value.

This standard of value, as contrasted with other standards of measurement, affects not only the immediate exchanges in a given market at a given time but also exchanges to be made in a

future market,—for example, in the transactions of debtors and creditors. Thus a given sale of credit for a consideration may at the actual delivery or payment represent either more or less than the amount of exchange when the contract was made. But in the ordinary transactions of the market, the use of other standards of measurement, however variable they may be in different markets, does not ordinarily, if confined to a single market, work any injustice on either party to the trade or transaction.

When A borrows \$100 of B, he may later pay more or less than \$100; but when there is a transaction between two parties involving, for example, 100 bushels of wheat, the bushels of wheat to the respective traders mean ordinarily the same thing. However, in the case of many commodities where the trading involves an exchange between dealers in different markets, confusion and difficulty arise approximating that to be found when the standard of value is of prime consideration.

It is not intended here to discuss primarily the inconvenience and losses resulting from the fluctuating standard of value, either in the same nation or between different nations, but to suggest some aspects of the importance to the market of developing standards and grades for food commodities. Frequently, discussion of the significance of changes in the standard of value seems to neglect the fact that there is an equally serious lack of uniformity in other standards of measurement. This is especially true in the United States where there are to be found many different standards of measurement of ordinary food commodities, and at the same time a very general absence of grading of food commodities.

VARIETY OF STANDARDS AND ABSENCE OF GRADING

The explanation of this great variety of standards and the general absence of grading is not far to seek. Owing to the great extent of the country, the scarcity of population and the wide separation of the settlements for many years during the early history of the United States, there was but a limited amount of trading among these groups. The market was in a large way a local one. There was also a great variety, even in the earlier period, of products and resources from this country. Then, too, the lack of transportation facilities and other means of communication between the widely separated settlements, all conduced

to restrict trading within the group. Therefore, great varieties of measuring units developed, each community selecting whatever seemed to answer its own needs, and thus were perpetuated through custom and use these numerous standards.

It was not until the population had increased along with the development of transportation facilities and other means of communication, that inter-group trading developed and these varieties of standards came to the notice of the traders. Even then the importance of the national and international market was much less than that of the local market, especially since the few products moving to the international market consisted of wheat and other staple commodities, such as cotton, in which any local differences in standards could in the international market easily be unified.

Another factor which has greatly contributed to the variety of standards is that of the character of our political organization. The federal government, the state governments and the local governments, each have under our theory of distribution of political power, authority to establish standards and grades for food commodities. The federal government has not until comparatively recent times been very active in this respect, and hence the state governments and the local governments—especially those of the larger municipalities—have been free to exercise their ideas on this subject. The result has been that the numerous state and city governments have passed laws establishing a great variety of standards and grades for food commodities.

Not only has there been lack of uniformity even between the states, but in a single state a state standard has frequently differed from that of a city or cities within the state, so that the result has come to be that for a particular commodity there may be a federal standard, or grade, a state standard or grade, and a city standard or grade. It is true that this is an extreme illustration of the variety, but examples can be found where there is this degree of lack of uniformity. Certainly the states have power to establish standards in grades for intra-state movements of food commodities different from those of the federal government. It may be a debatable question whether, under some state constitutions, city governments have the power to establish standards and grades different from those of the state. In any event, either

through the absence of prohibitions in the state constitution itself, or because of the strong force of custom, the above three-fold variety in standards does exist. The people of the particular community or section of the country thus become accustomed in their dealings to the standards of measurement and are loth in their exchanges with buyers and seller in other markets to accommodate themselves to the standards used in other markets.

Many examples of these variations in standards of measurement could be cited. For instance, in the case of the eight leading cereals in the United States, there are twenty-three (23) different bushels in use. The size of the hampers which are used in marketing certain food commodities, both perishable and non-perishable, differ very greatly. In the packing and selling of hundreds of commodities entering into various markets, the decimal system is sometimes used; and in other cases the dozen and gross, without any evident reason except custom to explain one or the other methods. Great confusion and inconvenience result from these variations in standards of measurement, and the adjustment necessary to be made represents an enormous outlay of time and money.

Then, too, the consuming public, as distinguished from the trading public, tends to perpetuate this unfortunate confusion. The average consumer, for example, does not like to buy potatoes or eggs by weight, for he has been long accustomed to buy these commodities either by measure or count. Vegetables are purchased by the bunch because that has been the accustomed method of marketing them.

ATTEMPT TO STANDARDIZE UNITS OF MEASUREMENT

There have been many examples where an effort has been made to standardize the units of measurement, and the reform has not been able to be made because of the opposition of the public or its indifference. Laws are passed or ordinances are enacted with respect to the establishment of standards of measurement, and they remain unenforced because public sentiment will not support the regulation, notwithstanding that in many of these cases the consumer is the one who would benefit the most from the observance of certain standards. Whether eggs are sold by weight or by the dozen makes a very great difference in the final result to the consumer.

An actual case in point can be cited of two large cities, located in different states, which draw their supply of eggs from the same general territory. In one city there is a regulation requiring eggs to be sold by weight; in the other, there is no such regulation. The very natural result is that in the egg-producing area the small eggs go to the market which has no regulation requiring their sale by weight.

Even in the case of such commodities as meat products, there is little uniformity in the preparation of the cuts for the market in different sections of the United States. This is especially true of beef and mutton, so that the result is that whenever an effort is made to compare prices of such an important food commodity as beef, great difficulty is experienced. Not only is there the necessary difference in grading the quality of the animals themselves for the market, but even the meat of the same grade of animal is prepared for the market in different ways, so that there is a great variety of cuts and very little actual correspondence in the same cut in different markets. It is very much a question whether the reforms needed to be made in the case of standardization and grading should concern themselves first with the commodities which are so directly of interest to the people as daily buyers of food commodities in the market or with those staple food commodities which move in interstate trade, and are of interest primarily to producers and traders.

DISORGANIZED FIELD OF UNGRADED FOOD COMMODITIES

All of what has been stated above has had prime reference to the establishment of standards of measurement. There still remains that very large and important disorganized field of ungraded food commodities. Scarcely a beginning has been made in this country in grading food commodities. What little has been done has been the result primarily of the activities of the federal government and not of the state or local governments, although not a few states have grading regulations of one or more important food commodities if they are produced in large quantities in the state. Some progress has been made in grading such commodities as wheat, potatoes, and a limited number of other food products.

Very well recognized difficulties are met when it comes to the

establishment of grades of food commodities. One of the greatest difficulties is the fact that a particular commodity which is sought to be graded is produced in so many different sections of the country, and varies in these sections so considerably with respect to size and quality, that a uniform grading law for the country as a whole might work a very great hardship on certain classes of the producers of this commodity. For example, if the grading in the case of potatoes is partly a question of size, difficulties are encountered, due to the fact that this product varies very considerably in size in different sections of the country, without a corresponding difference in quality.

It is probably true that grading laws should be considered primarily from the viewpoint of the dealers in these commodities; that is, the grower and distributor, rather than primarily from the viewpoint of the consumer. In other words, grading regulations are primarily of value as an adjunct to more advantageous marketing.

It is not true that grading regulations can be applied to any and every food commodity. There are very definite limits to grading and standardization regulations, and the attempt to establish them for all grades of food commodities would only lead to greater confusion than that which now exists. There can be, however, no difference of opinion as to the need for improved grading regulations and an increased number of uniform standards of measurement being established to facilitate not only the better marketing of food commodities, but also to confer a distinct advantage upon consumers.

The United States has passed out of its pioneer stage of industrial development. The local market has given way to that of the national market, and that has been succeeded in the case of many food commodities by the international market. The absence of standardization and grading, except as it was found in the particular local market, was of no particular significance in this earlier period. But now that buyer and seller are often separated by hundreds of miles, and therefore the commodity cannot be inspected nor samples sent, it is necessary that some means of conveying exact and accurate information to the buyer of what the seller has to sell be devised. The awkward method is yet used, in the case of some non-perishable food commodities, of sending

samples of the goods to be sold, whereas if there were an adequate, established grading law this would not be necessary.

In some cases producers in the United States have gone farther than those of any other nation in standardizing products, especially those of the machine industry and many other manufactured articles. The interchangeable part is a characteristic of American machines, and standard equipment has come to be a common thing in many lines of manufactured commodities.

Little, however, has been done with respect to food commodities. As has been suggested, the difficulty in arriving at a reformed system of standards and grading consists partly in the divided political authority over such matters, and partly in the fact that custom does not readily give way to a superior system. An improved situation may be brought about in several manners:

1. No political action or propaganda for the change might be taken up, leaving the whole condition to bring itself to bear in all its confusion more and more upon the people, and gradually, in time, through a recognition of these difficulties, a change looking towards uniformity might be made. This doubtless would be of very slow progress.

2. Another method of improvement might be adopted by leaving the whole matter in the hands of the trade groups themselves, in the belief that they would gradually bring about improved standards and grades.

3. An appeal to the governmental action might be made. This would seem the most promising of all, but a difficulty might arise in connection with using the government as an agency of reform. This has already been suggested in the divided control that exists between the federal and the state governments over the subject of standardization and grading.

It would seem, however, that in a situation such as this, where custom is long established, where there is great variety in practice in different sections of the country, and where divided political authority exists, a peculiarly good and promising field of activity is furnished to the federal government. The central government might well afford to take the lead by gradually increasing its regulations establishing standards and grades for food commodities. This would be not only a standard for interstate shipments, but because of its uniform nature the states would doubt-

less adopt the same standard and grade as that of the United States.

Indeed, in those few cases where the federal government has already established standards and grades, there has been a marked tendency on the part of states and cities to modify their laws and regulations, in harmony with those of the federal government. The Department of Agriculture and the Bureau of Standards of the federal government could, after careful investigation, suggest standards and grades for many food commodities.

The purpose of such standardization and grading should be the facilitating of the marketing of these commodities, and as an incidental result, the consumer would be greatly benefitted. The matter is not at all simple, for it will mean not only a change in state regulations but, what is even more difficult—a change in trade practices. In many cases of foods as well as other commodities there has grown up in the trade a system of grades that has little to justify it. It is frequently unnecessarily complex, and often too great a number of grades are established. These numerous grades are partly a result of historical development, and very often the commodity as now marketed does not justify such a large number of grades.

If a system of standards for measuring food commodities, and as simple as possible a system of grading were established, not only would the marketing of them be facilitated but the consumer could acquaint himself with grades of food commodities. At the present time he is frequently a victim of the distributor. He does not know what constitutes a number one product, and any system of grading ought to be not only limited as to the commodities but also simple as to its structure.

We need a great education of the buying public on food and food values. A proper system of standards and grading will conduce to this end.

Standardization and its Relation to Industrial Concentration

By HOMER HOYT

¹ Economist, Washington, D. C.

THE advocates of standardization may be surprised to learn that they are also committed to a policy of concentration of industry, yet that is the inevitable goal towards which their principles are carrying them. Standardization and the competitive spirit cannot live amicably together; one always tends to destroy the other. Thus if standardization be attempted under competitive conditions and if a number of rival firms undertake to manufacture the same standardized article, competition is entirely on the basis of price and the concern which can produce at the lowest cost and consequently sell at the lowest price will undersell its rivals and drive them from the field. Moreover, if standardization is retained, the progress towards monopoly proceeds at an accelerated rate of speed because every inroad which the largest concern makes upon the markets of its rivals may increase its output and lower its overhead cost per unit of product, and correspondingly decrease the output and raise the overhead cost per unit of product of the smaller firm. In those industries where unit costs decrease with volume the largest concern can use the very trade gained by price cutting as a basis of lowering prices still more, while the smaller concern with every loss of sales is either forced to raise prices or to increase its deficit at a progressive rate. Wherever standardization thus makes mass production under conditions of heavy fixed capital the most economical, competition will die of its own excesses and a combination of firms—in which each plant specializes on a given part of the standardized article or in which the most efficient plant manufactures all the articles under the most favorable conditions of quantity production—will be the only stable form of business organization.

Even as competition thus fails when standardization is master, so also is standardization overthrown when competition is kept in the saddle. For the only way by which rival manufacturers

¹ Mr. Hoyt is now economist of the War Trade Board, Washington, D. C.

can escape from the excessive price competition that destroys all competition is to transfer the competition from the plane of price to that of quality by splitting up the standardized product into many brands that are distinguished from each other by slight differences in size, shape, color or design. Since the consumer cannot properly appraise the pecuniary value of these intangible and aesthetic differences, he cannot readily compare prices of different brands and he thereby loses his power to stimulate cut-throat competition between manufacturers. On the other hand, when a producer makes his own specialty which is not exactly like the goods of any one else, he enjoys a narrow range of monopoly control over price, the power of which varies according to the strength of the consumer's preference for his particular brand. The device of the specialty not only tends to perpetuate competition and small business because it prevents ruinous price competition, but also because the production of unique patterns and ornamental designs that appeal to a narrow market and that require frequent change of manufacturing process neither requires large scale operation nor partakes of its advantages. Thus the independence and competitive freedom of the firms in an industry are maintained by the sacrifice of standardization.

Hitherto, competition has in the main prevailed over standardization among American manufacturers so that we have been showered with a vast multitude of slightly different brands. The chief result of this tendency has been to give the American consumer almost unlimited power in directing what styles of goods should be produced. American manufacturers have not attempted to exercise autocratic powers over our daily life. American consumers have not been forced to lie in an iron bed of Procrustes of standard dimensions, but they have had their choice of iron, brass and wooden beds of manifold sizes and designs.

The variety of design in ordinary articles has given full opportunity for the satisfaction of the most fastidious tastes; the discriminating judge of chairs had 518 patterns of piano stools and a countless legion of ordinary chairs from which to make his choice; the connoisseur of plows and cultivators could undoubtedly find the style dictated by his own individualistic notions from the varied assortment displayed by the agricultural implement dealers;

and anyone who was particular about the appearance of the interior of his house could spend his lifetime in turning over samples of wall paper. From the cradle to the grave, from the many varieties of cribs and baby carriages to the profusion of styles in burial shrouds and coffins, the American consumer has been unrestricted in his choice.

In order to satisfy his eccentric notions, however, the American consumer is compelled to forfeit the benefits of standardization. He cannot buy a standard limousine, standard units of clothing graded according to wool content and durability, standard sets of furniture, and standard canned goods of guaranteed purity, weight and quality, but he must select the kind and quality of goods he desires from the bewildering array of similar brands in our national window display. Not only must he spend his time in appraising ornamental or superficial differences between slightly different brands, and in educating himself against the wiles of the salesmen who would sell him an inferior brand with a similar label, but he must spend money for his liberty of choice. The extra materials and labor required by the ornamental features of the brands, the risk of special brands going out of style and the luxury of hand made and small scale production, must be paid by the producer and passed on to the consumer. The production of a medley of brands is also undesirable from the point of view of the manufacturer and of society. The manufacturer is limited in his market because the specialty lacks the wide range of demand possessed by the standardized article, and he is deprived of the benefits of large scale production. Society loses on account of the wasteful application of its resources.

Some of this individuality of style is worth its social cost. A society in which everyone rode in Ford cars and lived in uniform cement houses would be monotonous even though it were the most economical. It is also true that some differences in size and style are required by the exigences of industry and natural individual differences. But after allowing for these necessary minima, a further indulgence of individual eccentricities merely lessens the surplus capital that might be used for the cultural expression of a people along lines where fine differences count for the most in artistic effect.

In view of the counterbalancing disadvantages of a profusion

of brands, it would seem that our long-cherished liberties—of having so much to choose from that we cannot make an intelligent choice—are not worth clinging to. The economy of standardization makes a strong appeal to consumer and producer even in times of peace. When the exigencies of war also required standardization, the American public was quite willing to sacrifice its theoretical freedom of selection. The war—with its imperative demand for the mass production that was necessary to deluge the enemy with steel and to overwhelm him by superior weight of men and materials and with its insistent demand for the economy of material and shipping space that increased our supply of war material and that widened the neck of the bottle through which these supplies were sent to the battle front—compelled a degree of unification and standardization in American industry that has never existed before. American business men who standardized their products as a part of the team work that won the war also tasted the fruits of the economies of standardization and they now hesitate to return to the old competitive struggle and its diversification of brands.

Combinations were necessary to secure the standardization that was adopted during the war just as combination is necessary to secure standardization during peace. The war service committees that were organized in each trade under the United States Chamber of Commerce were the temporary war-time consolidations that substituted some degree of uniformity and standardization for an every-man-for-himself policy. These ephemeral industrial pools, formed only for the period of emergency, derived their binding force and their resulting powers to compel standardization chiefly from the spirit of national sacrifice. Permanent industrial combinations to effect standardization must run the gauntlet of an entirely different set of social conditions; they must meet the test of industrial fitness and the scrutiny of the law. The economic advantage of the standardization effected by these combinations has already been indicated,² but the legality of these combinations in times of peace remains to be discussed.

The existing law runs absolutely counter to the great combinations that would sponsor standardization. While standardization itself is not prohibited by the law, the only methods by which

² *Supra*, p. 284.

thorough-going standardization can be attained, i. e., by combination, are declared to be unlawful. The very suppression of the individualistic tendencies of manufacturers and the unanimity of all the firms in an industry that is necessary to secure standardization would result in that preponderating degree of control which is prohibited by the Sherman Act. The circumstance that the combination of industry was for the beneficial purpose of lowering costs by large scale production would not blind the eyes of the court to the fact that the keen competition over staples was thereby effectively restrained. The very power which arises out of great combinations is itself illegal, regardless of the mode of its exercise. There is no "good trust" except those raised under the Webb-Pomerene Act.

The way towards standardization thus lies between the whirlpool of ruinous competition and the sharp rocks of the Sherman Act. If one business man manufactures a standard article without some price agreement with his fellow manufacturers, he is faced sooner or later with a fierce price competition which ends in the survival of one firm. If all the business men in a trade agree to manufacture a standardized product without excessive price competition, they are guilty of violating the anti-trust statute. Standardization in minor details may be permanently maintained under competitive conditions and standardization on a large scale may survive the competitive struggle for a time; but the full benefits of standardization can be permanently reaped only by the great combinations that are frowned upon by the Sherman Act.

This breach between the economic advantage and the law in regard to standardization seems to be widening, and sooner or later a change must come. Either the law or the economic forces must yield. The law is the first to show signs of bending. The Webb-Pomerene bill permits combinations for export business, and since that necessarily means perfect harmony among all the firms of a domestic industry for the one purpose of foreign trade, it will be difficult indeed to cause these firms to fight in the other purpose of domestic business. The concession made to combinations by the Webb-Pomerene Act may prove to be fatal to the entire structure of anti-trust law.

The movement towards concentration will of course be resisted

by whatever competitive spirit exists among American business men, and if that combative inclination be strong, we may look for an increasing multiplication of brands instead of standardization. The strength of individualism among consumers—the desire of war-worn soldiers for variety and the pent-up demand of the civilian population for another round of the pre-war fads and luxuries—will contribute its influence towards increasing variety in goods. The necessity of giving employment to discharged soldiers will also be a potent excuse for producing useless frills that require an extra expenditure of labor power, in spite of the economic fallacy involved in such an argument.

As competition thus struggles to retain its former mastery over production, the forces of industrial combination and standardization are slowly mobilizing. The unification of the wants of all nations and the unification of the control of industry are sweeping us onward toward the quantity production of staple goods. Varied standards of style and fashion within the United States are being merged into one by the centrifugal force that is tearing down the barrier between the North and the South, and that is effacing the frontier which separated the West from the East, while throughout the world the differences in dress and tastes have been lessened by increasing social intercourse.

While this unification of wants is taking place, standardization and concentration of industry are also growing. As the foreign demand for American goods increases because of a market expanded by our new international relationships, by the increasing speed and carrying capacity of ocean steamers, the wider extension of our credit and reputation abroad, the universalization of wants accomplished by fraternizing with our Allies, and the vacuum in trade caused by the prostration of Germany, there will come an increasing tendency towards large scale production along lines hitherto operated as small scale units. As we develop more and more into a manufacturing nation, using our own resources for our own mills, feeding raw cotton to cotton mills even as steel is sent to the steel mills and thereby establishing integration on an ever-increasing scale, the industries of this country will be knit more closely together.

As some American industries thus tend to expand into monopolies of world-wide scope, foreign combinations of trades that

possess an advantage over similar American trades will also attain monopoly size by entering our markets and exchanging their wares for the products of our monopolies. In this merciless international competition, the small business unit will lose even the little market that it has, and the industries of the world will become concentrated into monopolies that from manufacturing centers located at the points of greatest geographical advantage will send their standardized products by swift and cheap carriers to the farthest recesses of the Orient and the developing jungles of Africa and South America. As the relationship between all nations thus becomes closer and more apparent, individualism, the pioneer spirit and the era of small business will pass from the United States.

Many business men already see the change forecasted in the industrial barometer, and they are preparing for the time when the legal dyke will no longer be able to hold back the gathering flood. In the meantime the prospective dangers of unregulated monopoly should hasten the preparation of new instruments of social control. We must draw the fangs of our new-born monopolies before they use their adult powers to seize control of our political and financial machinery for their selfish ends. The practice of standardization will create a new fund of wealth, but we must control the forces that bring it forth so that the masses of consumers will share its benefits.

The Work of the Bureau of Standards

By P. G. AGNEW

Physicist, Bureau of Standards, Washington, D. C.

ALL of the more important countries have found it necessary to set up some governmental agency for standardization and research work in physics, chemistry and technology. These institutions have exerted and are exerting a profound economic influence, in the past by reducing the confusion in weights and measures from which commerce and industry have largely emerged, and at present in clarifying allied subjects in which more or less confusion still exists. In the more highly developed institutions, more complex problems, such as standards of quality, are being undertaken, which frequently involve extensive physical and chemical research. Such problems are of great importance to extensive branches of industry.

The three countries in which the organization has gone farthest are Great Britain, Germany and the United States. The first institution to be established on a modern scale was the *Physikalisch-Technische Reichsanstalt*, which was established in 1887. This is a standardizing and research institution of the highest class. Germany has two other institutions, the *Normal-Eichungskommission*, which has control of the weights and measures of trade, and the *Materialprüfungsamt*, which, as the name implies, is devoted to testing and investigation of materials of various sorts. The latter institution is under the control of the state of Prussia.

For many years Great Britain has maintained a Standards Department under the Board of Trade. This has charge of standardization and inspection service and general administration of trade weights and measures. The most important British institution of the kind is, however, the National Physical Laboratory which was founded in 1898 by the Royal Society and has since been maintained by it with the aid of governmental grants. Recently, as a part of the reconstruction program in research and standardization, the direction of the Physical Laboratory has been taken over by the Department of Science and Research. Hereafter the work of the two institutions will be unified.

France has the Laboratoire d'Essais, the Laboratoire de l'Électricité, and has made other provision for such work. Plans have been drawn for establishing a strong centralized institution covering the whole of the field. The Department of Communications of the Japanese Government maintains a well equipped research and standardization laboratory. Other countries, including the British Dominions, have similar institutions, although not so extensive. As a result of the war and the innumerable technical problems arising from it, a great interest has been awakened in the type of research and standardization work carried on by such institutions, and there has been a considerable activity all over the world in establishing new institutions for such work, and in strengthening institutions which were already in existence.

Our Bureau of Standards, which was founded in 1901, is the only one of the national laboratories which covers the whole field in a single institution. In a general way it may be said to cover the same field that the British and German institutions do. There is the difference, however, that the bureau is not charged with the general legal administration of weights and measures laws, but its facilities are to be used for the improvement of weights and measures, for securing uniformity in state legislation concerning weights and measures, and in the administration of such legislation.

The work of the bureau is very extensive as may be seen by reference to the Annual Report of its activities which covers more than 200 pages. The work falls under three general heads: Standardization, Research, and Testing.

Manifestly it will be possible in a brief review of its activities to mention only a few of the more typical phases of the work. Moreover these will be chosen primarily to illustrate the activities of the bureau in the field of standardization. Some idea of the scope of the work may be obtained from the divisions into which the administration of the bureau is divided:

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|---------------------------|-----------------------------|
| I. Electrical | VI. Engineering Instruments |
| II. Weights and Measures | VII. Materials Testing |
| III. Heat and Thermometry | VIII. Metallurgy |
| IV. Optics | IX. Ceramics |
| V. Chemistry | |

Each of these divisions does standardization, research and testing work in its own field. The standardization work has primarily to do with the scientific and technical side rather than with what may be termed commercial or industrial standardization.

FUNDAMENTAL STANDARDIZATION

One extremely important phase of the bureau's work is that in connection with the fundamental units of measurement and their realization by means of concrete standards. One not intimately familiar with the work is likely to think of it as having been already accomplished. This, however, is far from being the case, and much important and painstaking work requiring the highest type of scientific training and experience remains to be done even in the older subjects. There are important fields in which only the merest start has been made.

The scope and the difficulties of the problems involved in such fundamental standardization are not generally realized. To secure agreement on the definition of a unit a great deal of investigation and discussion involving many conferences is necessary. After the theoretical definition of the unit has been agreed upon, it has to be translated into some form of concrete primary standard. Means must be provided for translating measurements from the primary standard to the reference standards of testing laboratories, and these in turn to the reference and working standards of manufacturers and others who must use them.

Unfortunately there is a widespread popular notion that the bureau's work is limited to standards of length and mass, but it has to do with many other units and standards of a fundamental nature, for example: the electrical units of resistance, electromotive force, current, inductance and capacity, the temperature scale, the calorie, standards of wave length, candle power, color, and others. Work on fundamental subjects involves coöperation with various technical organizations, including national laboratories of other countries.

During the early years of its existence a great deal of work was done by the bureau on the fundamental electrical standards, and international agreement was reached on some of these. Much, however, remains to be done. For example, final agreement has not been reached upon the details of the primary standards involved in the measurement of electric current itself.

Standards of Candle Power

One of the most important phases of the bureau's work on fundamental standards has been that in connection with standards of candle power. When the bureau took up the subject, the unit of candle power used by the gas industry differed by some 2 per cent from the unit in use by the electric light industry. The units in use in various countries showed similar differences. There was not, and in fact there is not now, an American national legal standard. After years of the most careful work, not only a national but an international agreement on the unit was reached. (This does not include Germany whose standard differs by 10 per cent from that of other nations.) The actual concrete standard by which the unit of measurement is realized is a group of carefully selected and seasoned electric incandescent lamps which are burned under the most carefully specified conditions. Groups of these lamps were prepared by the bureau and furnished to the national laboratories of France and England for comparison with similar groups used in those institutions. While nominally the different countries base their units on different standards, in practice the units are maintained by these groups of electric lamps by means of which international agreement was obtained. This work has had a profound and far-reaching influence upon the development of the industry. While the cost of the work ran into many thousands of dollars, the expenditure is wholly insignificant in comparison with the economic advantages that have accrued to innumerable branches of the national industry.

The Temperature Scale

A similar problem has been undertaken in connection with the standard scale of temperature. As in other cases involving standardization of a fundamental nature, a vast amount of difficult research work has had to be done, and more remains to be done. The international Bureau of Weights and Measures had already done considerable work on the subject when it was actively taken up by the national laboratories. As in other cases the necessary research work ramifies into many other fields; for example, in the case of the temperature scale, work was necessary in the theory of radiation, in the electrical conductivity of metals; thermo-electric properties of metals, the compressibility of gases, and many other fields of physics.

When the European war broke out, considerable progress had been made toward an international agreement on the temperature scale. While such an agreement had not been reached in detail, the bureau has been able to establish the temperature scale with accuracy.

The work of the bureau on the higher ranges of the temperature scale has been extremely important in the development of technical pyrometry, the measurement of high temperatures for industrial processes. A single industrial application is sufficient to indicate the great economic importance of the subject. In the steel industry there are many processes of heat treatment in which fairly accurate temperature control is necessary. Formerly many millions of dollars of steel products depended upon the trained eye of the foreman in estimating the temperature of steel from its color. The accurate scientific measurement and control of temperatures in such processes is one of the major improvements which have been introduced into the steel industry in the last few years. There are many other branches of industry in which the need of accurate temperature measurement and control is of far-reaching economic importance.

Color Standards

There are several important branches of industry in which the way has not been blazed for scientific standardization. One important industrial subject in which very little progress had been made until the last few years is the question of standardization of color. At first we might be inclined to think that this would not be a subject of sufficient importance to warrant an extensive scientific and technical investigation. It is, however, a subject of real importance to a large number of industries which have no direct connection with each other, and a brief indication of the bureau's work in this subject may be of interest as typical of the type of work which can and should be done in other subjects. The bureau has been appealed to by the following interests for assistance in technical problems which the interests concerned were not in a position to solve without assistance:—Railway officials, refiners of oils, paint and varnish manufacturers, tobaccoists, manufacturers of chocolate, dairymen, physiologists, psychologists, illuminating engineers, dealers in dyes, lithographers, packing companies, teachers of art, paper manufacturers,

textile manufacturers, ophthalmologists, state governments, and the following departments and bureaus of the national government: Bureau of Chemistry, Navy Department, War Department, Government Printing Office, Post Office Department, Bureau of Engraving and Printing, Bureau of the Census, Bureau of Entomology, Bureau of Lighthouses, and the Interstate Commerce Commission.

The following are some of the difficulties which were to be met: The fundamental physical principles upon which scientific systematization and standardization could be built up were well understood only by a very few experts who had given attention to the subject; there was no agreement as to definitions, nomenclature, and methods, even among these experts; those most vitally interested from an industrial or commercial point of view failed to comprehend at all the fundamental principles involved; pseudo-standards, empirical methods having no definition or even description other than the maker's name were in wide use, and without any attempt at systematic standardization; there was a lack of reliable quantitative fundamental data on the physical, physiological, and psychological factors involved; precision instruments suitable for the measurements were not available. By the aid of a small congressional appropriation, and with the coöperation of a few technical laboratories, most encouraging progress has been made in the removal of some of these difficulties. But much remains to be done.

In addition to the work which has been accomplished in the fundamentals of the subject, progress has been made in applications to several important industries, for example, in the specifications of the yellow tints in butter and oleomargarin, in the absorption of glasses intended to protect the eyes from harmful radiation, which was undertaken at the request of the American Medical Association, in the measurements of transparency of paper and tracing cloth, and in the color grading of cotton-seed oil, which is commercially sold according to its color.

This work may be taken as a typical example of the important technical and economic results to be obtained from a sound program of standardization. It furnishes a broad scientific basis enabling an entire industry, including both consumers and producers, to speak the same language. The advantages accruing

to a single branch of industry may, normally, be expected to be many times greater than the cost of the fundamental work which will eventually find application in scores of industries.

GENERAL STANDARDIZATION AND TESTING

The bureau does a large amount of general standardization, research and testing work which is of a decidedly less fundamental character than that which has just been described, although it is of great, and often of more immediate importance to the industries concerned. One of the important lines of work is the testing of reference standards for other standardizing laboratories, both public and private. Many manufacturers periodically send their reference standards to the bureau for test.

Relation to the Government

The bureau serves as a testing laboratory for the various government departments. Many of them are engaged in the design, construction and specification of a great variety of special apparatus in which the principles of physics and chemistry are involved. The bureau is constantly called upon to serve as a consulting and research institution for these departments.

TECHNICAL ASSISTANCE TO REGULATORY BODIES

The bureau is not charged with the administration of regulatory laws of any sort. It does, however, coöperate closely with state and local regulatory bodies in technical matters, serving as an agent in technical investigations and to a less extent in an advisory capacity. The coöperation is, however, by no means limited to the official bodies. Opportunity is offered for the fullest coöperation with the industries concerned; the purpose is to be helpful alike to the official bodies, to the industry, and to the general public. During the early part of its existence this work was limited to coöperation with weights and measures officials. Gradually such coöperative work was extended. During the last few years the problems of safety in electrical installation and of service standards in public utility work were taken up actively. Certain phases of this work have grown rapidly and have had a very important influence in securing improvements and uniformity in such standards.

Weights and Measures

The bureau coöperates actively with state and local authorities charged with the administration of weights and measures laws. Under its auspices an annual conference of such officials is held. In this manner much has been accomplished in securing improvement in and uniformity of weights and measures legislation and in the improvement of the administration of existing laws and regulations. This is a subject of great economic importance. Men who are thoroughly familiar with the subject estimate that the direct loss to the general public through the use of fraudulent weights and measures amounts to tens of millions of dollars annually. Probably the indirect loss to the industry and to the general public arising from such unsatisfactory conditions as exist is equally great.

A few years ago the bureau took up the testing of railroad track scales. Until this time no official tests of such scales had been made, although the total annual freight revenue based upon weighings made with such scales amounted to over two billions of dollars. More recently the bureau was called upon to test mine scales in a case of a threatened strike. Very serious errors were found in all the scales examined in the region in question, not a single one being within the tolerance allowable in such work. All the errors were found to be against the miners. As a result of the investigation, indictments were returned in the local courts and several convictions followed. The result was that the threatened strike was averted. By the aid of a small Congressional appropriation, investigations are being made in other regions. As is well known, the question of accuracy of mine scales is a prolific source of labor disputes in the coal mining industry. It is thus seen that this work offers opportunities of a very great national service in helping to eliminate an important source of labor disputes, to say nothing of the extensive economic savings made possible thereby.

Safety Standards

As a result of coöperation with organizations seeking to introduce greater uniformity and efficiency in rules providing against hazards to persons in the electrical industry, the bureau undertook the preparation of a national electrical safety code. The prepara-

tion of this code extended over four years and involved by far the most comprehensive investigation of the entire subject that has ever been attempted. It has now been adopted in one form or another, in part or in whole, by some twenty administrative bodies, and many others have taken favorable action upon it, thus leading toward uniformity in the various states. A new edition of the code is now in course of preparation. The project is necessarily a continuing one to keep abreast of changing conditions in the industry.

A gas safety code has been in preparation for some time but its development was very seriously retarded by war conditions. The bureau is preparing to undertake the preparation of a series of industrial safety codes. This will be done in very close coöperation with a considerable number of organizations which are directly concerned. The importance of thoroughgoing investigation of this whole subject looking to the development of satisfactory codes which may be adopted with reasonable uniformity throughout the country, is evidenced by the large number of industrial casualties. The number of such casualties occurring annually is roughly equal to our casualties during the war. There are annually four hundred thousand accidents sufficiently serious to be recognized by compensation boards, and of these accidents eighteen thousand are fatal.

Public Utility Service Standards

The bureau is in active coöperation with state commissions, municipalities and public utilities in the study of technical problems forming the basis of service standards. The work includes scientific and engineering research, study of the methods of testing and inspection employed by utilities, municipalities and commissions, and the preparation of specifications regarding the quality of public utility service. Service standards for gas and for electric light and power, published by the bureau, have received wide recognition and have been very effective in introducing uniformity into the different states and municipalities. In one important phase of street railway work, namely the electrolysis of underground structures, the most extensive investigation ever made of the subject has been carried out during the last few years and the bureau publications on the subject are now recognized as the standard authority on the subject. Investigations are being

carried on in these and allied subjects, the most important of which is the scientific and technical basis for telephone service standards.

EFFECT OF THE WAR ON THE BUREAU'S WORK

The demand for the services of the bureau in connection with military work was far greater than its facilities could supply, although special grants for military purposes were made by Congress, by the President, and by the War and Navy Departments, totaling more than \$2,000,000. The bureau undertook work on some two hundred problems having a direct, military bearing and it is safe to say that probably more than four-fifths of the work of the bureau was directly for the Army and Navy Departments. The staff was more than doubled.

Only a few of the more important undertakings can be mentioned. The largest single problem was the testing of master gages for practically the entire munitions production. By master gages is meant the reference gages used by manufacturers and inspectors. Over one hundred persons were employed in the work. Some idea of its economic importance may be gained from the statement, which had been made on reliable authority, that at least two American firms, who contracted for large quantities of munitions in the early part of the European war, each lost several millions of dollars by rejections, the primary reason being inaccuracy of gages. The accuracy required in this work was decidedly greater than that ordinarily met with in machine-shop practice. This work has an intimate bearing on many industrial problems in normal times. For example, the bureau is taking an active part in the work of the American Screw-thread Commission (the chairman of which is the director of the bureau). General standardization of gages will probably play a more important rôle in the future than it has in the past on account of industrial standardization.

Another extremely important undertaking was the bureau's contribution to the aircraft program. A laboratory was constructed for the test of airplane motors under conditions of temperature and pressure met by airplanes at high altitudes. A wind tunnel was constructed for determining experimentally the wind resistance of various airplane parts. Extensive investiga-

tions were made on problems in connection with aviation instruments. The work of the bureau on airplane fabrics led to the introduction of an entirely satisfactory cotton substitute for linen when supplies of the latter were found to be inadequate. The ignition systems of airplane motors, technical questions having to do with the dopes used in treating airplane fabrics, gases for filling military balloons, and other aircraft problems led to extensive researches.

There were many other important investigations undertaken for the military departments which will have a permanent effect upon the industries. One of these was the development of a new kind of pot used in the production of optical glass, which is an industry new to America, and in the establishment of which the bureau played an important part. Another was the assistance rendered the War Department in simplifying and standardizing materials for purchases.

National research councils have been established in all of the Allied nations, and provision is being made in all these countries, particularly in England and the British Dominions, for the governmental promotion of research and standardization on an extensive scale.

Analogy between the work of the bureau and that of the Agricultural Department has frequently been drawn, it being held that the bureau should eventually occupy somewhat the same position with respect to the technical manufacturing industries that the Department of Agriculture does to the agricultural industry. Physical and chemical research and scientific and technical standardization are playing a more and more important rôle in the manufacturing industries. Consequently it seems inevitable that the federal government should, in this way, do more and more to foster these industries.

Industrial Standardization

By C. A. ADAMS

Bureau of Standards, Washington, D. C. or Harvard University

MOST of us talk of standardization in a vague way, usually having in mind some particular corner of the subject, but without full realization of the comprehensiveness of the word, of the magnitude and importance of the field covered, or that the coöperation without which our modern society would be impossible would in turn be impossible without a large measure of standardization. It might almost be said that the degree of standardization in any nation is a measure of its civilization, certainly in the material sense of the word.

Even in the tribe a common language was necessary, namely a standardization of the meaning of words. A dictionary is merely a recorded standardization of the spelling, pronunciation and meanings of words, as determined by usage and common consent. Without the stabilizing influence of such records any language would be in a state of confusing and undesirable flux. To be sure we still have dialects and colloquialisms, but these are gradually decreasing. In civilized intercourse the accurate use of words is absolutely essential to mutual understanding, however rare it may be. Between nations we still have many different languages although most of the civilized world now uses substantially the same alphabet and there is a persistent effort to establish a universal language.

The next steps in standardization were in coinage, weights and measures. Our present Bureau of Standards is the outgrowth of the old Bureau of Weights and Measures, which was merely the repository for standards of weights and measures. Imagine the hopeless confusion in this country if each state had its own system of coinage and of weights and measures. Even between nations differences in languages, coinage, weights and measures, constitute barriers to intercourse, social and commercial, which tend to prevent interchange of ideas and commodities and thus to retard that mutual understanding which makes for peace.

But standardization has already extended far beyond these

fundamental fields and is now growing with leaps and bounds. A brief classification and review of each field may be of interest, excluding the alphabet and coinage as outside of the engineering and industrial group.

CLASSIFICATION OF STANDARDS

Language. Definitions of scientific and technical words, terms, phrases: Abbreviations, symbols and diagrams. Standardization of these elements of our technical language is just as fundamental to intelligent intercourse in this field as in the case of ordinary intercourse; in fact it is more fundamental since we are here dealing mostly with accurately measurable quantities.

Standards of Quantity. Length, area, volume, mass, weight, density, pressure, heat, light, electricity, magnetism, radioactivity—physical constants and their relation to each other.

Standards of Quality. Specifications for materials together with standard methods for testing their qualities.

Standards of Performance. Operating characteristics of machines and devices: Output, rating, speed, efficiency, durability, etc., as specified in terms susceptible to measurement.

Standards of Practice. Regulations or codes dealing with construction, installation and operation, based upon considerations of safety, quality, economy, convenience, etc.

Standards of Type. Standardization of definite types or varieties to the end of reducing the number of types and the cost of production.

Dimentional Standards. In any product the standardization of sizes or sets of dimensions in order to reduce the number of sizes and the cost of production.

NEED AND VALUE OF STANDARDIZATION

This would hardly seem to need argument, but a few illustrations may not be out of place.

Some years ago a friend purchased an automobile which had nearly as many sizes and types of bolts as there were bolts on the car, with a resulting inconvenience almost unbearable. Since that time the Society of Automobile (now Automotive) Engineers has carried on a tremendous campaign of standardization which has not only vastly reduced the annoyance of repair work to the

purchaser but has greatly reduced the cost of automobiles. It is also largely responsible for the primacy of this country in that field.

Another illustration from the same field was when the same society started to standardize steel tubing. All the manufacturers agreed except one who persisted in his odd sizes. Shortly thereafter this manufacturer, wishing to purchase some steel tubing, asked for prices and shipment. He found that the price would be about 30 per cent higher than for the standard sizes, and that the shipment would be made in three months as against immediate shipment of the standard sizes from stock.

An illustration from the electrical field has to do with the rating of electrical machinery. In the early days there was no agreement as to what was meant by a ten horsepower motor, and fair competition was impossible. The ratings of the several manufacturers varied as much as 30 per cent and the customer was at the mercy of the persuasive talents of the salesman. It took the Standards Committee of the American Institute of Electrical Engineers five years to develop a system of rating satisfactory to all concerned and capable of reasonably accurate checking by commercial tests. The results of this work have proved to be of world-wide value.

In certain fields, notably in standardization of types and in the dimensional standardization when the latter is carried into complete designs, there is an obvious danger that standardization may develop into crystallization and serve as a brake on progress; but this is merely a danger and not an obstacle, since it is obviously possible to keep the standards abreast of progress. Moreover standardization of national scope rarely extends beyond those fundamentals in which changes are not likely to be desired, although the difficulty of making a change is the greater. A notable example of this is our abominable English system of weights and measures which just "happened" in those early days when the importance of a national system was not appreciated.

INDUSTRIAL STANDARDIZATION IN THE UNITED STATES

Up to within a comparatively few years the work of industrial standardization in this country has been largely of sporadic nature, without any appropriate or authoritative organization for

its conduct. One of the best typical illustrations is that of machine screw thread standards, one of the most fundamental and important matters in the whole field of industrial standardization.

Screw Threads, Bolts, Nuts, etc. In 1864 a committee of the Franklin Institute recommended the adoption of a system devised by William Sellers, now known as United States Standard. In 1884 Charles Bouer of Warder, Bushnell & Glessner, Springfield, Ohio, adopted standard sizes of screw threads for bolts and taps, based upon the United States Standard screw thread. In 1895 the American, Hartford and Worcester Machine Companies issued standards for set-screws and cap-screws, also based upon the United States Standard screw thread. In 1906 the Association of Licensed Automobile Manufacturers adopted standards for automobile screws and nuts.

In 1907 the American Society of Mechanical Engineers accepted the report of its committee on standard proportions for machine screws. This committee was appointed in 1902, and had devoted five years to the task. As far as the screw threads themselves are concerned, the American Society of Mechanical Engineers standard differs only in very minor details from the Sellers' or United States Standard, but the report of the American Society of Mechanical Engineers gives standards also for taps, special screws, special taps, and screw heads of various types, together with tolerances.

In 1912, the Society of Automobile Engineers was organized and has adopted fine screw thread standards, as well as many other size standards of automobile materials and parts.

In the fall of 1918 a screw thread commission was appointed by act of Congress and is still at work. In this work some consideration is being had of the international situation, and, although there are obviously great difficulties in adapting our threads in those of the metric system nations, the differences between the United States and the British threads are slight.

Wire and Sheet Metal Gauges. Another illustration is in connection with gauges for wires, drills, and sheet metal. Of these there are several varieties still in use, although for copper wires, the Brown & Sharpe or American wire gauge is most commonly used for the smaller sizes, and the Edison or circular mil gauge for all sizes above 0000 B. and S. All these gauges were originally

adopted by some individual such as the twist drill gauge of the Morse Twist Drill & Machine Company, the Stubbs steel wire gauge, etc.

An act of Congress in 1893 established the Standard gauge for sheet iron and steel. Previous to this time there were many gauges in use, and the addition of this one seemed only to add to the confusion. In 1895 a joint Committee of the American Society of Mechanical Engineers and the American Railway Master Mechanics Association agreed to recommend the use of the decimal gauge,—that is a gauge whose number is the thickness in thousandths of an inch,—and to recommend the abandonment and disuse of the various other gauges then in use. In 1904 the Westinghouse Electric and Manufacturing Company abandoned the use of gauge numbers referring to wire, sheet metal, etc. There are now at least eight different sheet metal gauges in use in this country.

Apart from the standardization by individual manufacturers in the haphazard method illustrated above and still in operation to a considerable extent, standardization in this country is largely in the hands of a comparatively small number of our national societies, and the United States Bureau of Standards. The standardization work of these societies is briefly outlined below.

American Society of Mechanical Engineers. Until within the past few years the standardization work of the American Society of Mechanical Engineers was done by special committees which reported directly to the society. Now there is a central standardization committee with general supervision over the work of the special committees dealing with particular standards. The constitution of this society forbids the *adoption* of standards, but the effect is practically the same since the reports of the committees are accepted by the society and distributed as indicating approved practice.

Some of the subjects covered are as follows:

Thickness gauge for metals; machine screw threads; pipe threads and flanges; pipe unions; special threads for fixtures and fittings; locomotive and engine tests 1890; power test code 1915, being performances tests of power plant apparatus; boiler code in 1914, being standard specifications for the construction of steam boilers; standard tests and methods of testing materials.

In this last mentioned field the American Society of Mechanical

Engineers held sway from 1889 until 1898 when there was organized in Philadelphia the "American Section of the International Association for Testing Materials," which was incorporated in 1902 as the "American Society for Testing Materials."

American Society for Testing Materials. This society is highly and efficiently organized to cover the whole field of materials including: Structural timber; steel for all purposes including railway rolling stock, rails, structures, and castings of all kinds; standard magnetic tests of iron and steel; copper for electrical and other purposes; bronze; cement; fire proof materials; road materials; paint; coal; etc. There are thirty-eight standing committees with a total membership of about one thousand.

Society of Automotive Engineers. This is a very active society organized in 1912, which has accomplished wonders in the field of automobile manufacture. The work of its standards committee might be best characterized as dimensional since it deals largely with the standardization of sizes and parts. The aircraft work was undertaken in 1917 and aircraft standardization begun.

American Institute of Electrical Engineers. The standards Committee of the American Institute of Electrical Engineers was first appointed in 1898, to develop standards for electrical machinery and apparatus. The main committee comprises over thirty members, and the thirty odd subcommittees include many more. The ground covered includes:

Definitions; rating, performance and testing of all types of electrical machinery; wires and cables; switches, circuit-breakers and control apparatus; meters and instruments; telephone and telegraph; etc.

The work of this committee is accepted as authoritative in its field and has been followed to a considerable extent by similar bodies in European countries. After the illuminating engineers and radio engineers formed societies of their own with their own standards committees, their rules, somewhat abbreviated, have been printed as parts of the American Institute of Electrical Engineers rules, with a note as to their origin.

Electric Power Club. This organization includes about 90 per cent of the electrical manufacturing interests of this country. Its work in electrical standardization takes the American Institute of Electrical Engineers rules as a basis and extends them to cover many special cases. It also includes some dimen-

sional standards, name plate data and other details of interest to the manufacturer.

National Electric Light Association. The Electrical Apparatus Committee of the National Electric Light Association deals with such special standards as they find to be needed in the operating field, and not covered by the American Institute of Electrical Engineers or electric power club rules,—*e.g.*: Standardization of sizes, voltages and taps for transformers, terminal markings for transformers, uniform service rules for motors, etc.

Both the National Electric Light Association and the Electric Power Club are in close coöperation with the American Institute of Electrical Engineers in their work of standardization.

United States Bureau of Standards. The bureau was established in 1903 and although there had been previously a Bureau of Weights and Measures, it was merely a receptacle for the standards of length, weight, etc., and not an active bureau of standards. The work of the present bureau has expanded enormously since its inauguration, its total appropriation during 1918, including that for buildings, having been over \$3,000,000.00.

The ground covered is given in a separate article.¹

National Fire Protection Association. Amongst other fire protection codes this association is responsible for the national electric code which was first issued in 1897 with a revision every two years. This code does not conflict with but runs parallel to the national electric safety code of the Bureau of Standards which deals more specifically with safety to life.

Railway Standards. There are several associations in the United States, notably the Master Mechanics and Master Car Builders Association which prepare standards for railway construction.

Other Industrial Standards. Numerous other organizations of a less technical nature prepare standards in their particular fields.

MACHINERY OF STANDARDIZATION

As the need of standardization has grown, the work has been undertaken by existing organizations or by new organizations created for the purpose in special fields. But it often if not usually happens that a group of standards undertaken by one society

¹ See page 247.

is of great interest to several others. Thus the need for comprehensive coöperation has grown rapidly during the past few years.

The value of a standard depends upon its acceptability to all concerned with its use. No good results from the issue of a standard not thoroughly prepared and acceptable to all, as the resulting situation would be similar to that in which each community creates its own language.

A consideration of the above brief history of American industrial standardization will make clear the absence of any well developed machinery of coöperation between the numerous bodies interested in any group of standards, and of an authoritative body whose approval will be evidence that the standard in question has been thoroughly worked out and has the approval of all the interests concerned, for only then will the standard be of real value. To meet this need there has been recently created the American Engineering Standards Committee, whose organization and method of procedure is outlined below.

AMERICAN ENGINEERING STANDARDS COMMITTEE

The American Engineering Standards Committee was formed by joint action of five national engineering societies (American Society of Civil Engineers, American Institute of Mining Engineers, American Society of Mechanical Engineers, American Institute of Electrical Engineers and the American Society for Testing Materials), called the "founder societies," to meet a long felt need of some available and satisfactory machinery for the development of engineering and industrial standards, by the operation of which duplication would be avoided and coöperation between all interested organization and government departments secured; so that when a standard or group of standards is developed it will be acceptable to all concerned and will, therefore, be a real American standard. Moreover as international standardization develops, there is imperative need for an authoritative national body to deal with the corresponding foreign bodies. National engineering standards committees are already in operation in England, Canada, France and Holland, and others will undoubtedly be organized in the near future.

—The American Engineering Societies Committee now proposed for the development of standards is made up as follows:

(a) The committee proper or the "main committee" (with three representatives from each of the five "founder societies" and three government departments), whose functions are chiefly those of an organizing, coördinating and steering committee.

(b) "Sectional committees," one for each group of standards (with representatives from all organizations or government departments vitally interested in that particular group of standards), whose function is to prepare the standards in question under the direction of the most vitally interested organization known as the "sponsor body."

(c) The "sponsor society" or "body" may be one of the founder societies, a government department, or one of the "Co-operating Societies" of organizations.

(d) Under "cooperating societies" it is intended to include all organizations interested in the production of standards and willing to coöperate.

Procedure. (1) When the development of a particular group of standards is proposed, the main committee assigns the work to the appropriate organization as "sponsor," or, if the situation seems to indicate that more than one organization is equally interested, to these organizations as "joint sponsor."

(2) The sponsor then appoints the sectional committee subject to the approval of the main committee. The purpose of this approval is merely to assure the comprehensive representation of all the interests involved. Complete records of all interested organizations and of their standardization work and connection, will be kept on file and properly classified in the office of the main committee. The main committee or its secretary will thus be able, either promptly to suggest the proper representation to a sponsor on request, or to approve or amplify the representation as provisionally proposed by the sponsor.

(3) After a group of standards has been prepared and accepted by a sectional committee, it is submitted to the sponsor body for its approval and then to the main committee with a full report of its history. When approved by both the sponsor body and the main committee, the standards in question become American Standards.

(4) When the report of any sectional committee is being considered by the main committee, three members of that sectional

committee are invited to sit with the main committee to report, discuss and vote on the standards in question as if they were regular members of the committee. Thus each sectional committee (and therefore usually each sponsor body) will be represented on the main committee when standards in which they are interested are being discussed.

(5) The scrutiny of a standard by the main committee is to make sure that the proper procedure was pursued, that it was prepared by a comprehensively representative sectional committee, that the vote of acceptance was nearly enough unanimous, and that the standard is consistent with other related standards. Consideration is also given to international relations; but the main committee is not supposed to pass upon the details.

(6) After approval by the main committee the standard is published by the sponsor body with the statement that it has been approved by the American Engineering Societies Committee, and labelled "American Standard" with the appropriate descriptive title.

Briefly summarized this procedure is as follows: Standard assigned by main committee to sponsor body. Sponsor body appoints a thoroughly representative sectional committee, subject to approval of main committee. Sectional committee prepares standard and submits to sponsor body which then submits the standard with its approval to the main committee. The standard is then published by the sponsor body and labelled "American Standard."

It is hoped that this movement will receive the hearty coöperation of all organizations interested in standards. If so it certainly will contribute largely to the industrial development of the country. Similar committees are already in operation in England, Canada, France and Holland. With all of these the American Committee is in coöperative touch.

International standardization has already been carried on effectively in the electrical field through the International Electrotechnical Commission, and there is every reason to expect that it will spread rapidly under the influence of the American Engineering Standards Committee to the great advantage of our foreign commerce. In the broad sense, international standardization means a common industrial language and the removal of one of

those barriers which tend to separate nations and to give rise to misunderstandings. The more of these barriers we can remove and the more we come to realize that our interests are after all in common, the more likely we are to attain that lasting peace for which the world longs.

Lessons of War Cost Finding

By WILLIAM B. COLVER

Chairman, Federal Trade Commission

DURING the nineteen months—April 1917, to November 1918—during which the United States was a belligerent in the World War, American industry and finance passed through an ordeal that brought both strength and weakness into sharp relief. Before this nation could strike its full stride, things were reduced to rather elemental and primitive terms. Much of mystery and of pretense was swept away. Out of it all must come to those in varied pursuits and walks of life, a charity and understanding, one with the other, based on fuller knowledge.

During these nineteen months the Federal Trade Commission had a peculiar opportunity to sense what was going on, especially in the industrial world. It has been the cost-finding agency of the government; the expert accountant of the War Industries Board and its Price Fixing Committee, to the Army, the Navy, the Food Administration, the Fuel Administration, the Railroad Administration, the Shipping Board, the Post Office and other agencies.

It is to be remembered that cost finding and price fixing were two entirely different functions. One was a striving for exact fact through painstaking study and labor; the other, building on this fact foundation, was a matter of discretion, of judgment, of accommodation to seen and unseen forces and an effort to distribute equitably the hardships inevitably resulting from the dislocations of war.

In its cost-finding work the Federal Trade Commission of necessity had to search into the very vitals of industry. Some took this as a matter of course, appreciating at once the end in view. For some other industries, however, such intrusion into the privacy of business was met at first with reluctance and misgivings. For the latter this attitude quickly changed, however, and these industries also welcomed and aided the commission in its work. At the end it can be said that there remains no sus-

picion that a single business secret has been betrayed. Costs were secured from whole industries—sometimes involving in a single inquiry the examination of the books of thousands of companies. These results were brought together and presented without disclosing the identity of individual figures except to the responsible officers of the government, and after opportunity for scrutiny by each concern of the processes and results as to its individual case.

Thus came confidence and understanding where impersonal discharge of duty was met with candor. The vast majority of patriotic and enlightened men of affairs welcomed every effort to steady and stabilize industry as it gathered its vast powers to ride the red seas of war and to deliver the tremendous blow against the enemy.

Before this country entered the war, and, therefore, before war powers could be exercised in control, a huge and false price structure was built up, and in spite of all that could be done, became more aggravated. Cost of living and wages went upward as prices rocketed. Price structure and its attendant inflations today are among the chief perils of the reconstruction period. That they are no greater can be attributed almost wholly to the cooperation of industry in the program of price fixing which checked, so far as possible, mounting prices, and, for the time, negatived price based solely on supply and demand.

One great handicap lay in the fact that basic natural resources had been appreciated in value before the price-fixing function came into operation. European belligerents had for three years been bidding, frantically, for the treasures that nature had placed under our stewardship, and as a result our raw materials had been hugely written up before the United States entered the war. So when price fixing was undertaken it started from inflated values for undug ores and coal, untouched petroleum and uncut forests. Despite this false start and the difficulties that flowed therefrom, cumulating in all subsequent industrial operations, price fixing did stabilize industry and insured it against ruinous collapse at the end of the war.

It is estimated that, in its work for various government agencies, the Federal Trade Commission obtained cost and production figures of upwards of 10,000 companies, in scores of important

industries and many minor ones, which had an approximate aggregate investment of twenty billion dollars, and the commodities directly affected by such cost findings represented annual sale values of at least thirty billions of dollars,—not far from twice the amount of the first, second and fourth liberty loans taken together. These cost studies by the Commission demonstrated frequent and great deficiencies in the accounting methods employed by mining and manufacturing concerns and especially in cost-accounting methods. In some of the oldest and greatest industries there was not even an attempt at that determination of unit costs and profits by products which is essential, generally, to the safe conduct of industry. It is evident that where such cost accounting is not established it should be introduced and where it is defective it should be reformed. Inventories should be carefully kept; labor and material should be accounted for as used; indirect and overhead charges should be fairly allocated and proper allowance made for depletion and depreciation of resources and plants.

On the other hand, capital charges for construction should not be mingled with operating or production expense nor should there be introduced items of actual or imputed outgo such as income and profit taxes, depletion or appreciation of plant investments, or interest on capital owned. However, where complete records are kept, it is relatively easy to correct bad principles, reject improper items or introduce omitted ones. Inventories and records of expense and sales by products are necessary to compute profit and loss by products.

The business world, well aware of the extent to which defective cost-accounting methods prevail, is alert to promote reforms. A few years ago the Federal Trade Commission initiated an effort to be helpful in this direction and applied to Congress for funds to carry it on. As these were not given the movement lagged, but, as a result of the Commission's enforced studies and as a by-product of its war work, that effort may well be profitably and economically resumed. If the earlier effort of the commission could have gone forward before the war, the government would have been repaid many times over during the war through making it possible to ascertain costs much more expeditiously and cheaply.

In the immediate future the question of costs will be especially critical for the nation's business in arriving safely at post-war readjustments. The matter is important to the individual producer, to his banker and to the industry and the public at large.

The cost and profit findings of the Commission developed many facts of interest but were prepared under such pressure that there has been little time as yet to analyze or interpret the results. Two facts, however, which are generally known, may be mentioned. First, the average cost during the war period was much higher than before the war. Such increases were frequently as much as 100 per cent. Second, the variation in costs between different companies, often considerable in normal times, was enormously exaggerated under war conditions.

The great increase in average cost was due in part to increase in cost of the instruments of production and material and supplies; to increased cost of labor partly through increase in wages but more through violent and frequent shifting of labor and a consequent loss of the efficiency that springs from organization, habit of work and special skill; to wastes caused by effort for increased production and, of course, to the general depreciation of money in terms of goods or services. The cost of living continued to mount rapidly and with it wages and labor cost.

Fundamental to the cost increases, however, was the writing up of values of natural resources. This tended to bring about the production of raw materials from relatively barren or inaccessible sources with a consequent diversion of labor, capital and transportation to uneconomic operations. It is doubtful whether high prices did really stimulate production to the degree that has generally been believed.

Where there were successive stages of production in an industry (sometimes integrated and sometimes independently operated) the costs were increased by the taking of high profits between the successive stages of production. High costs or high profits, or both, in one stage had a cumulative effect on costs in all succeeding states—a sort of pyramiding of cost. Price fixing, arriving too late to get at the source of the trouble in the short space of the war, was useful in checking its unlimited extension.

The abnormal variation in costs came largely from the bringing in of uneconomic supplies of raw materials and the writing up

in value of advantages by integrated concerns and those controlling natural resources. Congested transportation and dislocations of labor with the consequent irregularity of industrial operations also made for wide cost variations.

In considering such variations, however, it should be borne in mind that the lower cost company may not be more profitable than the higher cost producer even when both sell at the same price. Often the lower cost is the result not of greater economies or natural advantages but of investment in more stages of production or in more extensive mechanical equipment, and the larger unit profit resulting from the lower cost is absorbed in providing the proper return on the greater unit investment.

Not the least benefit of cost finding, incident to price fixing, was the bringing together, with government officers, of the representatives of the industries for full and frank discussion of costs, methods and products. This, with the assembling of such a body of current data as was never before had in this country, demonstrated the value of such meetings and of the preparation and exchange of such proper and useful information. It would seem that the Commission might well continue, at least as to certain industries, this assembling and distribution, currently, of basic and reliable information and that, well within the law, industry meeting with government officers might continue to exchange helpful experiences and information without the danger of being suspected of price fixing or other restraints of trade.

If certain laws, enacted to deal severely with admitted abuses, are fully observed in their spirit, in this manner, it would seem that the public interest would be fully served. In such case, a peace-time adaptation of the war-time meetings between individuals and government for frank discussion, would be as helpful as it would be innocent of wrong intent or harmful effect. Such open conferences might be expected to serve all the good and necessary ends which are among those sometimes sought by clandestine meetings. Pursued in the generous American business spirit of fair play such conferences might be extremely useful by ascertaining the facts and clearing away doubts and suspicions.

From the experience of cost finding, we believe we may argue for:

- (1) Standardized accounting systems, suited to the various industries.
- (2) Cost and profit accounting for individual products.
- (3) Reasonable standardization of products and elimination of excessive costs due to unnecessary multiplication of styles and types.
- (4) Compilation and issue of current, basic trade information.
- (5) Conferences between industries and government for the exchange of proper and useful views and information.

As for the outlook there need be foresight but no fear. A period of readjustment must be met with the new and broader view. The same coöperation of industry, of labor, of capital and of government that armed the nation for war will make it still greater in peace.

As a nation we organized lines of supply and communication from Chile and Australia and Alaska and from every state and every farm and factory, and through these lines across oceans and continents to the battle front of France. As a nation we arrived at a power to dispatch a ship loaded with men and food and supplies, on the average, of every ten minutes night and day, Sundays and holidays. As a nation we launched ships at the rate of 490,000 gross tons a month—about 700 tons every hour, on the average. As a nation we armed and sent across the sea our young men, true crusaders of democracy, at the rate of 10,000 a day. As a nation we threw upon liberty's altar billions and billions in loans—about \$500 at every tick of the clock, day and night, Sundays and holidays.

Such a nation, as a nation, may turn with confidence to the solution of whatever problems of industry or finance which the future may hold in store.

After-War Readjustment: Rectifying the Price Situation

By HON. A. C. MILLER

Member Federal Reserve Board, Washington, D. C.

NOW that the war has been fought and won, "what next" is the question everybody is asking and for lack of some other sounding word or phrase, nearly everybody is answering "reconstruction." It is our national habit when we have to move on from one position to another to help ourselves along with a word or a phrase; so it was during the war, when we heard much of "unification," "coördination," and "conservation." Now that we have left the war behind and are looking forward to after-war problems, we hear much of "reconstruction." We have borrowed the word from Europe where the war has left conditions very different from those obtaining here. It is just as well that we should recognize the differences. The war has left us with some difficult financial and economic problems but it has not left us with any such problems of reconstruction as it has Europe, unless we are going to embark upon the venture of trying to "make the world over." It will help much, I believe, to put us in the right frame of mind toward our after-war problems if we substitute for the word "reconstruction" the less ambitious but nevertheless suggestive phrase used by the President the other day in his address to Congress, of "economic and industrial readjustment."

EUROPE'S PROBLEM, RECONSTRUCTION: AMERICA'S, READJUSTMENT

Contrast for a moment our situation with that of the European belligerents which have had four years of war. Sixty millions of men at one time or another have been drawn to the front. Two or three times that number have been drawn into work so closely related to operations on the front that they were virtually in the line of battle, so far as the normal processes of economic and industrial life were concerned. Ten millions have been killed, fifteen or more millions are left so maimed and diseased that they will be of doubtful industrial value, unless or until they are

"reconstructed." These killed and maimed and diseased represented much of the flower of the industrial population of Europe. They represent a heavy and grievous loss to their countries' industries. Their loss must somehow or other be made good through finding and training others to take their places. Until this is accomplished, the industries which depended upon their skill will limp. Here is a problem of reconstruction.

The lands in many of the choicest and most fertile districts of Europe were laid waste by the war; farmsteads were burned, tools and live-stock are gone; the very soil itself is destroyed. Here is work of veritable reconstruction. Factories, mills and foundries in France's busiest workshop district have been destroyed or so badly injured or dismantled that much must be done before they can again take their place in the industry of the world. Here again is reconstruction. It is clear, also, that much work must be done, not only in the fought-over and devastated districts of Europe to repair the work of ravage and destruction, but also even in those where the sound of a gun was never heard. There has everywhere in Europe been such deterioration of industrial equipment through enforced neglect of upkeep that much must be done before factories and mills are brought back into good working order and are able to turn out products which can be used by their own people or sent into the markets of the world in payment of needed supplies and materials. This also means reconstruction.

No such fundamental economic and physical problems as these are left to us as a heritage of war. Our situation has been one of comparative immunity and safety. Our losses of life have fortunately been few and our losses of property negligible. The main cost of the war to us, apart from the pecuniary cost which is reckoned in the amount of our national war debt and taxes, is to be found in the disorganization of industry through the necessary shift from a peace basis to a war basis. It has been estimated that, including the men who went into the armed service, some eighteen million persons have been involved in war work of one kind or another, mainly in industries producing for the support of our armies and the supply of our European associates. Some of these and in some cases many will have to be shifted from their present employments.

Places will also have to be found for the returning soldiers.

But it would be a mistake to exaggerate the extent of the redistribution of the labor force of the country that will be thus occasioned. It must not be overlooked that many of the basic industries, such as steel, copper and the metal trades generally, which were speeded up or enlarged for the purposes of war production, are normally very large industries and it is altogether probable that they will remain permanently enlarged to meet the heavy after-war demands for their products and that consequently many of those who first found employment in these industries, as a result of the war, will remain with them. At the most, taking the situation by and large, our after-war condition will present a problem of reemployment, or reorganization, rather than a problem of reconstruction. It is a problem that we may well believe will find its own solution in due course—indeed is already finding its solution—if the process of economic and industrial readjustment is kept measurably free from unnecessary interference on the part of the government, and if good temper, forbearance, and a spirit of accommodation are shown by all interests during the period of transition. Government help there may have to be in stabilizing industrial conditions from time to time through employment on public works, but the intervention of the government should be by way of supplement to, rather than substitute for, normal business agencies. The problem is mainly a business problem to be handled by business men.

EUROPE'S ECONOMIC AND FINANCIAL NEED

It is even likely that in Europe the process of reconstruction and recuperation will be speedier and more complete than many now imagine. The parts of Europe that have borne the brunt of the war are those whose people are possessed of the greatest economic capacity—energy, ambition, inventiveness and determination. They are impatient to wipe out the traces of war and get themselves back into working order. Much assistance will be needed by them from the outside world in the first steps of the process and that means chiefly from us. But with that assistance, the repair of waste and the accumulation of new capital may be expected to go forward rapidly in Europe in the next few years. Indeed the rapidity of Europe's industrial recovery is likely to be one of the economic marvels of all time.

Europe will need goods and credit from us if she can get them on a reasonable basis. The goods she will need are mainly food-stuffs, raw materials of industry and the basic materials of construction. Provided she can get these at reasonable prices, she will take them in large amounts, and trade and industry may be expected to be active in the United States for a few years and our problem of economic and industrial readjustment may be expected to find much of its solution in this way.

The credits Europe will need will be both short-term or commercial and long-term or investment. The former we can easily provide through the further development of acceptance credits and the aid of the federal reserve banks. Long-term or investment credits present a different problem; they call for capital, and capital must first be accumulated or saved before it can be loaned or invested. It may confidently be expected, however, that if Europe finds in the American market the goods it needs at reasonable prices, ways will be found of financing the purchases and investments with the aid of our bankers and the investing public. The main pivot of the after-war economic situation, particularly in its international aspects, is prices. Europe cannot afford to buy much from us on the basis of present war prices without endangering her economic solvency and it may well be doubted whether it will be to our permanent interest, if we undertake to finance her reconstruction, to encourage her to buy much at war prices if her solvency is thereby threatened. Much will, therefore, depend, both for us and Europe, on the course that prices take during the coming months and years as to whether the period of transition, readjustment or reconstruction, whichever it may be, is to be a short and satisfactory one or a long and wearing one.

THE PRICE SITUATION

Of all the financial difficulties confronting the country at the close of the war the price situation is, in a business way, the most serious and the one calling for the most immediate correction. Fortunately for the United States, this situation is not confined to us. The whole commercial world has been involved in a series of extraordinary price disturbances growing out of the war. While the situation is worse in some countries than in others, it

is serious in all. The general dimensions and the gravity of it are sufficiently disclosed in the broad statement that, in the course of the four years of war, the world level of prices has risen by one hundred per cent. In some countries prices mean depreciated paper prices, in others gold prices, but in all an increase has been experienced that makes the problem of price rectification one of urgency everywhere.

It cannot be emphasized too insistently that economic life can never be normal and that business conditions can never be safe until prices in leading world markets work their way back to some sort of a stable or normal level adjusted to conditions of national and international demand and supply, as these will be when industry and trade among the nations have recovered from the shattering effects of the war and have resumed something that can be called a normal course. How quickly this process will be worked out will determine how long the world will be in the uncertainties and difficulties of a period of transition. Periods of transition are always periods of strain. To shorten them by such means as can be foreseen to have a desirable effect is the part of good economic and financial policy, both for the individual business man and for the nation and for the commercial world at large.

There is already much welcome indication that the more foresighted of the American business communities are looking ahead to the falling of prices as something that is inevitable in the normal course and, instead of waiting, are anticipating and assisting the process of readjustment by voluntary price reductions. Such was the action recently taken by the steel trade, the greatest of the country's barometers of industry, an action that is bound to have a decisive effect in many related fields. Many merchandising establishments, also, are looking ahead and taking such precautionary measures as they can to prevent being involved in avoidable loss in the transitional period of price readjustment. Bankers are scrutinizing credit statements and are advising clients to be careful not to be caught with large inventories on a falling market, and the advice meets many prepared minds and much ready acceptance.

Such mental preparation paves the way and thereby hastens and makes safe the process of price readjustment. But when all

is done in this way that can reasonably be expected of the business man, it will still remain true that much of the readjustment of prices must come about through other action in which the community at large must have a principal part.

What is it that has driven prices to the dizzy heights that have prevailed during the past four years? In general, the answer of course must be war—the economic and financial disturbances the war has produced. It is difficult enough, even under normal conditions, to specify the factors which determine the level of prices. The price situation, as we find it in any given country at any given time, is the result of a complex of forces in which the production and costs of goods, market demands, the saving and investment of capital, the state of credit, and the volume of money and currency, all have their measure of influence. These have all been at work during the war, but they have been so complicated in their action by the war that no simple explanation of the movement of prices in our own or other countries is adequate fully to explain the causes of what has been taking place.

HIGH PRICES: SCARCITY AND INFLATION

From the very beginning, the war caused a great intensification of the demand for a great variety of materials and supplies needed in modern warfare. With all the efforts that have been made to adjust the productive organization of the different countries to the supply of these much-needed things, there has, until quite recently, been a relative shortage of many of the primary materials and basic commodities of war. To that extent, they have commanded "scarcity values" and their prices would have ruled high even had there been no alteration in general monetary conditions. Much patient and methodical statistical investigation will be needed to determine the exact extent to which high prices during the past four years can properly be regarded as "scarcity values."

To the extent that the prevailing high prices have been "scarcity values" we may expect the situation to right itself in due time as industry shifts from war production to peace production and the vast numbers of able-bodied workers, who have been withdrawn from productive industry to military service, are reinstated in the industrial army. The production of many basic materials and commodities, which have been in short supply, will gradually

catch up with the demand, and values be brought back more nearly to normal. This movement has already begun.

Looked at from this point of view, the problem of reestablishing a normal price level is a problem in *production*, one to be worked out in factory, farm and workshop. Prices will move toward normal, and goods will become cheaper as they become more abundant. They will become more abundant as the wasteful processes of war consumption come to an end and production resumes its normal ways.

But "scarcity" is a relative term and there is so much evidence of an artificial abundance of money in comparison with the things that are purchasable by it that the abundance of money must be credited with at least an equal influence in explaining the high prices which have prevailed. Special attention will, therefore, have to be directed in the process of a return to a normal basis of prices to the condition of banking credit and currency, which has promoted or sustained the upward flight of prices.

The balance sheet of the belligerent world has been swollen by the addition of about two hundred billions of public debt on the liabilities side of the account with only partial offsets in the way of newly created wealth on the assets side of the statement to insure economic solvency among the European belligerents and especially the Central Powers. Not the least of the wonders worked by the war has been the ease with which vast public debts have been contracted on what must be considered a relatively favorable basis so far as concerns interest rate and other terms.

The fact that the war was not merely or mainly a war of armies but a war of nations in which everybody had his part to play does much to explain the unprecedented financial achievement of all the belligerent nations. Patriotism may have run as high in other wars but never before did it so nearly embrace whole communities to the last individual in its magnificent sweep. It has become a matter of commonplace observation in the United States that our people of many different races, creeds and conditions have never before been so nearly one in thought, feeling, spirit, purpose and action, as during the war. All of the four great liberty loans have given the evidence and measure of the people's devotion to the nation's cause. Twenty-one million subscribers to the fourth liberty loan tells much of the story of

our financial achievement—much, but not quite all. For the achievement is not quite all that it appears to be and must become. The rest of the story will be found in the expanded condition of the banks.

Of the eighteen and a half billions of loans thus far put out by the government, it may be estimated that six billions are being carried by or in the banks. To the extent that subscriptions to government borrowings are paid, not out of cash which the subscriber has actually saved out of his income, but by credit borrowed from his bank, the payment of the subscription must be regarded as having given rise to an expansion of bank credit to approximately an identical amount. Such expansion of credit, unless it sets in motion new forces of saving, results in inflation, first of credit, then of currency, and, as a consequence of both, inflation of prices. A bank's deposits and currency are the children of its loans and investments. When the loans and investments, therefore, which occasion an increase of deposits and currency, are not definitely tied to the production or saving of goods, they must cause a rise of prices. When the rise of prices resulting from an expansion of credit and currency is not able, or until it is able, to induce a commensurate increase of productive industry to match the increased buying power of the community, the resulting condition is one of inflation, that is, one in which there is more purchasing power, in terms of money, afloat in the community than is called for.

This condition has not been peculiar to the United States. Credit expansion and currency expansion—inflation, for short—have everywhere played their part in the financing of the war, fortunately not so much in the United States as in other countries, but yet enough to cause concern; not disastrously as in former wars, but not without producing some serious consequences and leaving in some of the belligerent countries grave dangers and in all of them, ourselves included, a troublesome after-war situation. The great central note-issuing banks of the modern world—such are also our federal reserve banks—have made inflation easy. In the estimation of many they have also made it safe. They certainly have done much to make it technically safe. The theory upon which the great note-issuing banks pretty generally have proceeded is that the test of banking safety is to be found in the

reserve ratio. The more gold, the more credit and currency. Such appears to have been their monetary logic. Acting upon this theory, they have scoured their respective countries of most of the scattered gold.

"GOODS" VALUE VERSUS "GOLD" VALUE

So long, therefore, as the great central banks could gather in gold enough to maintain a suitable mixture of gold in their resources and thus clothe their liabilities with a suitable covering of gold, their position was one of technical safety, and appearances were good. It may be admitted that appearances count for much in the psychology of credit and banking. But more than appearances and more than technical safety and, therefore, more than gold, are necessary to the good functioning of reserve and note-issuing institutions. The character of their general assets as well as the adequacy of their reserves determines their real condition. There must be wisdom—great wisdom—and, at times, courage as well as wisdom in the administration of note-issuing and reserve credit banks if more than a condition of technical banking strength is to be maintained and the world made safe against the costly evils of inflation. That lesson the world is about to learn as a result of the experiences of the past four years. Until it is learned and the credit and currency situations in the leading countries rectified accordingly, the business of the world will be in a state of maladjustment with the industrial unrest and strife that are usually bred of maladjustment and financial confusion.

The fact that inflation in the United States has not been caused or attended by suspension of gold payments or a discount on paper currency, such as was experienced during the Civil War, should not blind us to the realities of the situation. Suspension of specie payments may take place without producing a state of inflation. (Such was the case in France during the Franco-German War of 1870-71, when the Bank of France suspended specie payments but managed its note issues with such care that they were never at any time over-issued and never went to anything more than a nominal discount as compared with gold.)

Recent events, particularly in the United States and among the northern neutrals of Europe,—which like the United States have

experienced enormous accessions to their supplies of gold during the period of the war,—show that inflation may take place without a suspension of specie payments or the occurrence of a discount on paper. It was the very abundance of gold that helped to advance prices in the United States before our entry into the war. The currency of the United States now, as then, is a gold currency. Prices in the United States are, therefore, gold prices. This fact is incontestable. There is gold enough and more than enough to assure the absolute convertibility of our paper currency in gold. The trouble with our situation is not that the paper dollar is not as good as the gold dollar; just the reverse is true: it is. The trouble with our situation is that neither the paper dollar nor the gold dollar will buy as much as they did before inflation of prices began. At prices as they are, the paper dollar buys as much as the gold dollar. The gold dollar is no better than the paper dollar. The two are interchangeable. Our trouble, therefore, is with dollars, irrespective of their kind. It is one of quantity, not of quality, or, at any rate, not of quality in terms of gold. Our elastic note issue system has enabled us to place the production of paper dollars on a "quantity basis" without endangering the integrity of their gold value. The trouble is with the goods value, not with the gold value of the American dollar. Our difficulty is,—and therein consists our inflation,—that dollars, good financial dollars, "safe" dollars, gold dollars, have been created in such abundance in comparison with the amount of goods purchasable by them that they have, as a necessary result, lost in their purchasing power—in other words, the supply of money has become disproportionate to the supply of goods with rising prices as the inevitable result.

Since the beginning of the European War, or between the dates of July 1, 1914 and September 1, 1918, the total money in circulation in the United States, as shown by the Treasury statement, increased from \$3,402,015,000 to \$5,621,311,000, an increase of \$2,219,296,000 or 65 per cent. Total deposits of all banks,¹ between the dates of June 30, 1914, and June 29, 1918, the latest date for which complete figures are available, increased from \$21,279,000,000 to \$32,589,000,000, an increase of \$11,310,000,000 or 53 per cent. Loans and discounts for the same dates show an

¹ National, state and private banks and loan and trust companies.

increase from \$15,340,000,000 to \$22,059,000,000, or \$6,719,000,000, an increase of 44 per cent. Total investments for the same dates show an increase from \$20,924,000,000 to \$31,982,000,000, or \$11,058,000,000, an increase of 53 per cent.

Since our entry into the war, or between the dates of July 1, 1917, and July 1, 1918, the total money in circulation in the United States, as shown by the Treasury statement, increased from \$4,850,360,000 to \$5,621,311,000, an increase of \$770,951,000 or 16 per cent. Total deposits of all banks,² between the dates of June 20, 1917, and June 29, 1918, the latest date for which complete figures are available, increased from \$30,443,000,000 to \$32,589,000,000, an increase of \$2,146,000,000 or 7 per cent. Loans and discounts for the same dates show an increase from \$20,502,000,000 to \$22,059,000,000 or \$1,557,000,000, an increase of 8 per cent. Total investments for the same dates show an increase from \$28,611,000,000 to \$31,982,000,000, or \$3,371,000,000, an increase of 12 per cent.

The index number of wholesale prices in the United States computed by the Bureau of Labor Statistics shows a rise from 98 in June, 1914, to 202 in August, 1918, a rise of over 100 per cent. The index number for retail prices for the same dates moved from 99 to 171, an increase of about 73 per cent. Since the entry of the United States into the war, the index number of wholesale prices has risen from 171 in April, 1917, to 202 in August, 1918, an increase of 18 per cent, the index number for retail prices for the same dates having moved from 145 to 171, an increase of 18 per cent.

These figures certainly reveal a very considerable increase in the volume of banking operations in the United States since the beginning of the European War in 1914. An aggregate of probably over ten billions (an increase of about 50 per cent) of new purchasing power since the beginning of the European War, mainly in the form of bank deposit-currency, has come into existence during this period. The portion of this increase, which is to be charged to the period beginning with our entry into the war, cannot be accurately determined for lack of adequate data. But an indication is supplied by the increase between the dates of June 20, 1917, and June 29, 1918, noted above, in the figures for total deposits and money in circulation, an increase of the two

² National, state and private banks and loan and trust companies.

together of 8 per cent. It seems within the probabilities that, of the ten billions of new purchasing power which there is good ground for believing have been created in the United States since July, 1914, a fourth may conservatively be regarded as chargeable to the period since our entry into the war.

To the extent that this increase in the supply of the purchasing media of the country has not been offset by a like increase in the production of goods, it must be regarded as unnecessary and superfluous from the economic point of view, whatever may be said in justification of it from the point of view of political and general financial expediency. To the extent that it has been offset by increased production, it presents no difficulty. That there has been an enormous increase in the physical output of goods in the United States during the past four years cannot be questioned. Never before has the country come so near to realizing its full productive capacity; never before has there been so little unemployment or idleness. Some estimates place the increase in the physical product of the country during the past four years as high as 25 per cent. If we take a more conservative figure, of 20 per cent, it would suggest the inference that a commensurate proportion of the volume of credit and currency existing in 1914, or some four billions of dollars in the aggregate, was probably legitimately called for by the growth of production in the past four years.

In estimating the amount of credit and currency contraction that will have to take place before our price situation can be regarded as in a fair way to become normal, these four billions should properly be deducted from the statement of the present volume of these items. It would appear probable, therefore, that some six billions of credit and currency in the aggregate have been created in the past four and one-half years that cannot be regarded as having been occasioned by the requirements of industrial growth, as measured in terms of physical units. This is also approximately the amount of war securities and war loan paper, as has already been stated, that the banking system of the United States is today carrying. To this extent the expansion of banking credit and currency would appear to have been occasioned by the banks having assumed the burden of assisting the placement of Treasury borrowings by the extension,

use and lending of their credit. Such use of credit is almost of necessity inflationary in its immediate effects and in its continuing tendencies until corrected.

RECTIFICATION OF THE PRICE SITUATION

There can be little question of what form the correction should take. Where there has been *inflation*, there must follow *deflation*, as a necessary condition to the restoration of economic health. Contraction of bank deposits and currency, through the liquidation of war loan accounts, is clearly indicated as the next and necessary step in the process of bringing the credit currency and price situation back to normal. Those who in our liberty loan campaigns were persuaded to borrow and buy must now be made to save and pay. "Save and pay up" should henceforth be our slogan. The problem of correcting a state of banking inflation is mainly a problem in saving. We must either put more goods behind the outstanding volume of credit and currency—that means production—or we must reduce the volume of credit and currency to suitable proportions—that means saving.

Expenses and spending must be kept down; money must be saved. As it is saved, it must be paid to the banks in liquidation of war loans and other non-productive borrowings. If the money saved is in the form of deposit or checking credits, then the total volume of these in existence and in use will be diminished as they are used to cancel an equivalent amount of loans and thus will the banking structure be contracted and prices be rectified. If in the form of bank notes, the cash holdings of the banks will be built up and they will be enabled to reduce their borrowings from their reserve banks and in this wise the notes will find their way back to the reserve banks, reducing at once the volume of their outstanding note liabilities on the one side and their holdings of bills discounted on the other. Thus will saving effect the reduction in the volume of outstanding currency and credit. There is no escape from this necessity. So long as inflation exists, the nation must continue to practice thrift. Only thus can the capital be created and supplied which will wipe out the inflation that already exists and avoid or minimize such new inflation as may threaten in connection with the great borrowings that must still be made for the use of our government and the governments associated

with it, to say nothing of the large demands for capital that will be made on the American investment market by Europe in the process of reëstablishing her industries.

The government's requirements for the remainder of the fiscal year have been stated as likely to be not less than seven billions. This amount, added to the six billions of outstanding war securities which, it is estimated above, have not yet been permanently absorbed, gives us a total of thirteen billions of public securities which must be taken up out of genuine savings if our financial and credit system is to be sterilized of the taint of inflation which at present is upon it. When this is accomplished, prices are likely to be at something that can be regarded as a normal level. Until it is accomplished, there will be an unstable price situation. As it is gradually accomplished, prices will go back to a normal basis in an orderly manner. But if a considerable part of the new borrowings, which the government must make during the fiscal year and until war accounts are finally closed up, are financed by any considerable expansion of banking credit, we are likely to have more inflation and an aggravation of a price situation which is already sufficiently serious and burdensome.

REPLENISHING CAPITAL

Europe's post-war financial and industrial requirements cannot even be conjectured. But they are likely to be very considerable if, as has already been suggested, goods can be bought in the American market at reasonable prices and capital obtained on reasonable terms. The destruction, waste and deterioration of plant facilities and other industrial equipment must amount to an aggregate, taking all of the European belligerents together, that it will take some billions of dollars worth of materials and supplies to replace or repair. The amount which Europe is indebted to the United States on the financial account because of the heavy borrowings that have been made in the American market the past three years, will probably be not far from five hundred millions of dollars for interest alone when peace is established. Europe could probably use to good advantage two or three times this amount in the process of replenishing her capital during the next two or three years if conditions generally were favorable. It may be expected, therefore, that capital will be in

strong demand in the post-war period and that much financing of an investment character will have to be undertaken by America in the process of helping the reconstruction of Europe and the reestablishment of normal conditions throughout the world.

The situation presents a duty to be undertaken by the people of the United States, as well as an opportunity to be embraced. Investment rates of interest are likely to rule high for some years and to make saving a remunerative sacrifice. There is no method by which capital can be created except by saving—by saving productive power from the production of goods destined for immediate consumption to the production of goods destined for capital equipment. It is essential from every point of view that the depleted capital of the belligerent countries shall be restored and the terrible gap torn in the industrial structure of Europe by four years of war filled up. Just as the war taught us to draw with closer approximation and finer appreciation a line between industries and goods according to their bearing on the prosecution of the war—the “essentials” being those that helped, the “non-essentials” those that delayed or hindered—so the same principle, in view of the urgent economic condition with which the war has left the belligerent countries, suggests an analogous application of the same principle—after-war essentials being those that help industrial recuperation, the non-essentials those that hinder or delay. The consumption and, therefore, the production of non-essentials must be kept down in order that the production of the new essentials may go forward at prices that will attract demand.

Europe cannot afford to buy great quantities of goods in the American market, urgent as is the need for materials of post-war industrial reconstruction, unless our prices fall, no matter how ready we stand to finance them, because Europe cannot afford to handicap her reconstructed industries with a capitalization that will not be warranted by earnings when post-war prices get back to normal, as sooner or later they will. For her industries to do otherwise would be to invite serious losses and possible bankruptcies.

Indeed, much the same may be said of our own domestic business situation. Increase of the capital account will, in general, be a perilous proceeding for any undertaking involving large permanent investment and heavy fixed charges, so long as prices of mate-

rials of construction are on an inflated basis. Thus does an inflated state of prices tend to check industrial enterprise and, therefore, to retard industrial recovery. More than that, an inflated state of prices always adds to the uncertainties and, therefore, to the hazards of business, when once the crest of the movement has been passed. Thus is a speculative tinge given to even ordinary business in periods following inflation of prices and credit. Such periods, it has frequently been observed, tend to promote speculative activities and to breed business crises. For whatever adds to the uncertainties and hazards of business not only tends to induce speculation but also, for that very reason, to add to the chances of business miscalculation and, therefore, to the percentage of business misadventure. And it is business misadventure, when the percentage runs high enough, that makes for crisis. For the business crisis is merely to be regarded as a rough and wholesale method of adjusting the capitalization of business to the indubitable facts of the market—through earnings to prices—when capitalization has gotten out of line with the price trend, the business crisis being little other than a swift and violent method of correcting errors of business miscalculation, when such errors have been extensively committed.

CONCLUSION

The more the matter is pondered, therefore, the more, I believe, the heart of our national after-war business and financial problem will be found in the price situation. There are many other factors—such as wages, taxes, interest rates—but none that is comparable in its importance to the price situation nor unaffected by it. If our price situation is quickly cleared up by deflation, wages and taxes may be expected to adjust themselves to the altered conditions. Industrial enterprise can then make its calculations on something like a stable or normal basis and the period of post-war readjustment need have little terror for us. The whole world is inflated.

A great opportunity, therefore, awaits the country, which is the first to be able to begin marking down its prices toward peace levels. The world needs us and what we can produce. It needs copper, cotton, steel, machinery and many other things. Some of these it will take at any prices but it will take much if our

prices are such as to invite foreign demand, and we need give little attention to artificial methods of taking up the slack in the labor market and otherwise stabilizing industrial conditions, if we take up promptly and proceed vigorously with the solution of the price situation.

Sanity in Reconstruction Legislation

By HON. ALBERT C. RITCHIE

Chief Council, War Industries Board

THE transition to the arts of peace presents to the statesmen and economists of America industrial problems more complex and varied than the transition, less than two years ago, to the arts of war. Our problem then was a single one. It was to concentrate the industries and resources of our country upon the work of supplying the materials needed, directly or indirectly, for war purposes.

This, indeed, involved many phases. It required the creation of new facilities to produce instruments of modern warfare which we had not produced before. It required the increase of our existing war facilities, and the conversion of non-war industries into war industries. It necessitated the curtailment, sometimes the cessation, of non-war business, and the elimination of waste and unnecessary production, so that capital, labor and materials could be released to make things needed for the war. It required priorities in production and in transportation, so that war needs could be made and moved before non-war needs, and the more urgent war needs before those that were less urgent.

But all these activities, and more besides, far-reaching and extraordinarily novel as they were, were only different avenues leading directly toward a single goal for which we aimed,—the mobilization of our resources, our capital and our labor, to the end that they should speedily produce the things necessary and helpful in winning the war, before producing things which did not contribute to that one great purpose.

Now, with that purpose accomplished, the journey back to the basis of peace is begun, and there is no longer a single goal towards which we aim. Not alone from this country, but from every part of the earth, will come calls to labor, industry and capital for purposes as many as the ambition and the initiative of men and nations, free to strive for their varied commercial and industrial interests, can devise.

On every side we hear measures suggested to aid us in our

journey from the single work of war back to the manifold works of peace. For almost every problem which can be conceived, remedies are being crystallized. Business men submit this plan, economists that, statesmen still another; and legislation of some kind is an incident of most of them.

The reasons for this wealth and variety of post-war advice are largely two: First, there is a marked tendency to regard as due to the war problems which are not really due to the war at all, but which exist independently of the war; secondly, there is inevitable inability at this time to know accurately what many of the problems which the war has really caused will be.

The first reason accounts for a large amount of suggested reconstruction legislation. The advocate of this economic doctrine or of that, sees in the experience of the war some reason for the adoption of his particular theory, and he straightway urges his theory as the solution of one of the problems which the war has left us, overlooking entirely the fact that the problem was with us before the war was thought of, and that at most the war merely emphasized its existence.

One noteworthy instance of this is the discussion of the effect of the federal anti-trust laws upon business and the question whether these laws ought to be modified or temporarily suspended or even repealed altogether. This has been recently and broadly discussed as if it were a war reconstruction problem. It is not. It is the same problem of competition against combination which first confronted the American people half a century ago, and of which our solution has been a series of statutes against combinations and monopolies, the underlying principles of which are certainly sound but the defect of which is their uncertainty, in that a decision of the supreme court is usually necessary before it can be positively known whether any business union violates the law or not.

The war has served to reopen this whole question, and the soundness of our solution of it. In the first place, in order to mobilize our resources upon a war basis, it was often required to pool production in a way which might not have been justifiable except on the ground of military necessity. This raised anew the question of whether the business of the country would be best subserved by a continuance of the same policy in time of peace.

Then the war showed how much industry can do, through organization and united effort properly supervised, towards eliminating extravagance, waste and unnecessary production, and how commercial and industrial economies can reduce and stabilize costs. All this is directly in the interests of the consumer, and yet, without the consent of the government, which would be at least difficult to secure in time of peace, industry fears to unite even for such beneficial purposes as these.

This condition could in large part be remedied by a law declaring that combinations for these purposes, which are really for the consumers' benefit, when approved by an appropriate governmental agency, should not be held to be in unreasonable restraint of trade,—in other words, a law defining the particular kinds and purposes of combinations which are reasonable instead of leaving this question, as the supreme court has done, to the application in every case of the "rule of reason" as determined by standards of judgment outside the law itself.

But this whole question, profoundly important as it is, was not created by the war. It is not a war reconstruction problem. The war has simply emphasized its existence, and the possibility of an improvement in our policy towards it. In this same class belong many other problems for which legislative remedies of one kind or another are now suggested,—woman suffrage, minimum wage, permanent employment agencies, price regulation, federal supervision over capital issues, federal loans to private enterprise, and a score of others.

In the main, none of these are true war reconstruction problems. They may have been given new life and emphasis by the war; but the war did not create them, and they should not be confused with or treated as questions which the war itself has brought to our door. Passing to this latter field, it is remarkable how very few questions are embraced within it which, at this time, are adequately and clearly defined in all their elements.

One of these is the disposition to be made of the railroads, the steamships, the express companies, and the telegraph, telephone and cable lines, all now under government control. This control was exerted as a war measure solely. What to do with it may fairly be regarded as a problem left on our hands by the war, and yet even its solution can hardly be divorced from questions of

government ownership and regulation, which have long been with us, and, in the case of the steamships, from questions which may arise from the terms of final peace.

In the same class of war problems falls the disposition to be made of the war risk insurance policies, whether they shall be carried by the government or transferred to private companies, and, in either event, under what conditions as to reserve,—although here, too, the solution will largely involve questions of government insurance and pensions which are by no means new.

The method of taxation, whereby we will arrange for the payment of our war loans for which sinking funds have not yet been provided, and for the discharge of our war debts and obligations which are to be met from the general treasury, is, of course, an inheritance of the war. It must be solved with scrupulous regard for the ability of industry to pay, and without undue obstacles to initiative and new enterprise. In this connection, two suggestions may be permitted relative to the pending income tax bill,—the speedy passage of which, by the way, is imperatively needed for the business welfare of our country.

First, the tax upon new enterprises must not be so high as to destroy the initiative to embark upon them. To avoid this, a reserve should be permitted which will be sufficient, over a term of years, to amortize the expenditures necessary to organize and bring new enterprises to a producing basis. The second suggestion is vital to thousands of manufacturing and mercantile establishments today. In computing their income for the purpose of taxation, these establishments must take into account not only their cash receipts, but also their inventory values, and the materials which make up the inventory must be taken either at cost or at market value, whichever is lowest. The going concern necessarily invests and reinvests a large amount of its receipts in the materials in which it deals, so that at the close of the year its profits are not in bank, but are in large part represented in its inventory, at either the cost or the market value of the materials. If, now, the goods are sold for as much as they or the raw materials entering into them are carried in the inventory, then this profit is realized, but if, because of a fall in prices, the goods are sold for very much less than the inventory values, then, of course, the profit is simply a paper profit, and never realized at all.

The close of the year will find the manufacturers of this country carrying millions of dollars of merchandise and materials at cost or market prices. These prices were high, because the goods were bought during a period of rapid advance in the cost and value of practically all raw materials and of finished products as well. They will go into the year's profits at these high figures. But the goods are still on hand, and the manufacturers are now confronted with a period in which there will be a decreasing value for these same goods. Prices are certain to fall, and the goods will not be salable for anything like the inventory values, and yet the inventory value is the basis upon which this year's profits must be computed.

The manufacturers of the country should not be required to pay taxes on profits which are paper profits, which never have been and never will be realized. Thousands of them could not do so without serious business hardship or ruin. To remedy this obvious and really disastrous injustice, a provision should be added to the pending income tax bill which will permit the manufacturer to deduct from his gross income a reserve sufficient to meet the probable fall in prices of the materials which are carried in his inventory at cost. When the goods are actually sold, the profit actually realized will be charged against this reserve, and the tax will be paid upon it. In this way, the government would receive taxes upon the profit actually realized, which is all it is entitled to, and the manufacturer would be relieved from paying on bookkeeping profits, never realized in fact.

The government-controlled utilities, the war risk insurance and taxation have been referred to as problems to which the war really gave rise. What else is there due to the war? Many possible questions may be conjectured and many of them may materialize. But what else is there which at this time has crystallized into a problem of sufficient definiteness to show the need for legislative solution, and which may not change or even disappear altogether by developments in this country or by actions at the peace table?

It was at first thought that legislation must be had to meet in some way the conditions resulting from the cancellation of millions of dollars of war contracts. What was to become of the vast stores of raw materials bought for these contracts and now released? And the manufacturers who had borrowed against these con-

tracts,—were they to be called by the banks and become bankrupt because they could not pay? And what of the laborers whom these cancellations would throw out of employment,—must not some provision be made for getting them work elsewhere?

Some legislation in this field has, indeed, been found necessary. Protection must be given to manufacturers who began work upon government orders without waiting for formal contracts, so that the orders might be filled without delay, and who now find these orders cancelled, and have no contract under which they can receive their just compensation. But this is only a comparatively small phase of what many believed was a tremendous problem confronting us.

As a matter of fact, these cancellations are being made under careful supervision, without undue abruptness, and with proper regard to the industries and to the labor involved, and to just compensation; because of this, and because, also, of the facility of adjustment which marks American business, the whole problem which a month ago loomed so large is rapidly working itself out.

It is the same with countless other questions for which legislative remedies are now suggested,—what to do with our returning soldiers and sailors and with our women workers, with the surplus of supplies which peace leaves on the government's hands, with our war plants which must now be converted into peace plants; the development of new and of foreign markets; the control of industrial prices to prevent ruinous competition; and a hundred and one other questions which, we are told, can only be solved through some form of government paternalism.

Perhaps the future may show that legislation will be helpful to some of these conditions; but in the meanwhile let us not forget that the soldiers and sailors who had the initiative and the industry to learn the arts of war, and the courage to face and suffer death for the victory they have won, will be able to apply themselves with equal initiative and industry and courage to the arts of peace, which, less than two years ago, were all that most of them ever knew. The women of America can take up their duties of peace without legislative assistance, just as they needed no legislation to take up their duties of war. The government can be trusted to dispose of its supplies wisely, and without competition with private interests. American industry and business initiative will

of themselves solve problems of plant conversions, new markets, and price stabilization while paternalism is still evolving plans to help them.

So we will find that problems which many now think may require legislation will not require legislation at all. They will solve themselves. Let us wait to see if this is not so, or at least wait until the problems themselves are clearly defined, before advancing legislative cures for ills which may never need them. For the rest, we must await the outcome of the Peace Conference at Versailles. From that may develop post-war industrial problems that are both real and serious. Changes in the map of Europe, iron ore, copper or other deposits or coal mines transferred from one nation to another, obligations assumed by us to transport and supply food and raw materials to Europe, lost or acquired colonies, tariff regulations of other countries, international pooling of raw materials, these and a hundred other possibilities may change the industrial balances of the world which has gone, and break down old economic advantages and barriers and erect others for the world which is to be.

These possibilities we can now see only in their outline. We can see them plainly enough, it is true, to know that allied with the international and political problems of the Peace Conference, or incidental to them, there may be questions vital to the economic and industrial welfare of our own country, the solution of which may bring us or deny us the markets of the world.

But these questions have not taken definite form as yet, and so we cannot now shape the policies which should be ours. We can, however, rejoice in the confidence that the best business brains of the country,—the brains of men whose hands have been upon the pulse of our industrial and economic life, and who know the international moves which may check it as well as those which will inspire it with renewed vitality,—will be in our country's service at the Peace Conference, watchful of our industrial situation, and suggestive as to its needs.

Thus out of it all may come not only a peace which is lasting, but also that which is essential to our welfare and future growth,—an economic and industrial progress proportioned to our natural resources and advantages and to our national initiative and due.)

The Outlook for America's Industrial Future

By W. L. SAUNDERS

Ingersoll-Rand Company, New York City

WHEN we think of William Penn we always think of Philadelphia. But just now, as one reviews events during the past four years, as we look forward to a future in which we draw the picture of a better world, there comes to us another and a broader significance in the life of Penn. This man, some two hundred and fifty years ago, stood for the very principles for which America has fought a world war—liberty, justice, fair play—"the reign of law, based upon the consent of the governed." In an age when a popular revolution had almost destroyed popular liberty; when such philosophers and leaders of thought as Locke preached that government should rest upon property; when all history and all experience decried the sovereignty of the people, William Penn boldly asserted man's capacity for self-government: his vision was one of human liberty and he went so far as to establish a colony founded upon liberty. Penn was noted for his success with the Indians,—and why? Is it not because of his sense of fair play, his recognition of the rights of others? He built up a good will, based upon justice,—in fact, his whole life teaches that it pays to follow the very antithesis of the Teutonic policy. His writings are full of hope for permanent peace, something about which we are talking very seriously just now. I rather think that this was the controlling influence that has led the President of the United States to go to the peace table. It is said that after Penn had concluded his famous treaty he solemnly laid the parchment on the ground in token that the soil was common to all people. Here we have the first suggestion looking to the freedom of the seas.

During the war we were frequently asked the question,—What is going to happen after the war? The question was a very difficult one to answer, because no one could tell when or how the war would end. The story is told of Marshal Joffre, that as he was getting into his automobile during his visit to this country an American said, "Oh, Mr. Joffre, just one more question, please.

When do you think that the war will end?" Turning to his chauffeur Joffre said, "Tell this gentleman when the war will end."

Early in 1915 I sat at a luncheon next to the chairman of the United States Steel Corporation. He told me that the war must and will stop within a year, "For," said he, "it is beyond the power of human endurance to keep up such a pace." About thirty days before the armistice was signed the president of the United States Steel Corporation told me that fighting would not stop till December 1919.

For several months after the war began there was scarcely a prominent authority in America who did not predict hard times for us; our industries and mines were working part time only, our finances were disturbed. In May 1915, no less an authority than Victor Morawetz, writing in the *New York Times*, said: "It seems unlikely that there will be a general revival of enterprise or expansion of business in the United States or a healthy or lasting increase of security values during the continuance of the war." Yet shortly following this prophesy there came to us the greatest period of prosperity in our history.

STRONG FINANCIAL CONDITION OF AMERICA

I am giving from the records of the past some thoughts that may pave the way for my own plunge into the future. Let us first think of the present. Surely America was never before in better condition to stand hard knocks. Our condition is like that of the trained athlete, prepared for the combat. We are a creditor nation now and a very large creditor nation too. Europe owes us about eight billions in bonded debt alone. Our banks have one-third of all the gold in the world, yet (and this is an element of strength for us as well) the banks of Europe have more gold in their vaults than they had when the war began. Our federal reserve system has been established. It provides a public reservoir in which reserves are held for use and concentration at points where they are most needed; by its privileges of rediscount money is kept liquid; through federal reserve notes credit is made elastic. The strength of this system is such that we might now without danger export much of our gold to enable other nations to maintain stable conditions of exchange.

At the close of our Civil War we had a bonded debt of three and

one-half billions. When peace is made we are likely to have a debt of twenty-five billions, eight or ten of which will be in the shape of foreign loans. Comparing our increased wealth, our population and our development in financial and industrial resources, it is apparent that we are in a stronger position now than we were after the Civil War. Everyone expected a collapse in industry then; inflation was high because of the issue of greenbacks, yet no crisis came. Business activity continued till 1873. A million soldiers were demobilized then and the industries absorbed them without shock. We shall dissolve an army now three or four times as large, but the country has grown in far greater proportions. It is interesting to note that wholesale prices fell some 30 per cent at the close of the Civil War. Though conditions now are not identical, yet there is every reason to expect a fall in prices of staple commodities in the near future. Food and fuel are likely to be exceptions because of the needs of Europe.

There is much fallacious teaching about the material loss incurred by war's destruction. In peace times nations increase in wealth in proportion to the productivity of the farms, the mines and the industries. In war time that which is produced and destroyed, as for instance munitions, must be subtracted from the annual increase of wealth. Some of the belligerents, such as France and Belgium, have probably gone backward, have grown poorer in material things because of actual destruction of property, but England has probably had only a diminished rate of increase of wealth because of the war; or, in other words, the normal increase has been somewhat retarded because much that has been produced has been destroyed. This, if true at all in the case of the United States, is true to a lesser degree, because of our late entrance into the war and the lesser proportion of goods destroyed. Except for the increased burden of taxation and conditions brought about by credit inflation, the ending of the war ends the burden of the war; the cost has been paid during the war.

We have witnessed the destruction of the prophetic but fallacious idea so generally held, that a world war must of necessity be a short one because of the great cost. We know that this war did not end because of lack of money. The money used did not come from a storage fund already on hand, but chiefly from goods pro-

duced daily while the war was going on. Our resources were mainly employed to build things that were promptly destroyed, hence while there was a great waste of energy and a loss of potential capacity to add to our capital, yet we are no worse off now so long as we retain our capacity to still produce useful goods. That capacity we have to an even larger degree than before the war.

It is plain that had America not entered the war we should have been industrially and financially richer. Whether we are richer because of the war than we should have been following our normal progress, it is impossible now to determine. We do know, however, that our industries have been enlarged on an unprecedented scale. Much of this took place before America entered the war and at a time when profits were high, so that a good deal of the plant increase has been written off. The tools and equipment purchased for war purposes are mostly standard and with some exceptions they may be used for general industrial purposes. The steel industry in particular has a large capacity in works and equipment. Much steel will be required throughout the world.

A BETTER LABOR SITUATION

As to labor, the situation is better than ever before because of a better understanding between employer and employe. We shall hear of strikes and rumors of strikes. They are likely to come, first through the process of readjustment, which has already begun in cutting off overtime. During the war, and partly because of conditions brought about by the war, industrial work generally has been put on an eight-hour basis. That is, the rate of wages has been so much per hour for eight hours' work. During the pressure for output, works have been run ten hours and more and labor has been paid extra time for this extra service. This means of course, that the income which labor has received has not only been an increased rate per hour but a still further increase in net earnings due to overtime.

As soon as the armistice was signed overtime was cut off, which means about 25 per cent reduction in the income which many workers had been receiving. This income was, of course, strictly speaking, a war income. Labor was pushed to do more work in many cases than conditions of human safety and comfort should warrant. If we are to agree that there is a period of fatigue, which

comes say after eight hours of labor, then it is not only inhuman but it is uneconomic to work beyond eight hours. Mr. Vanderlip, in a recent address, said that his plumber told him that he had been making \$400 a month during the war doing war labor; that this had been stopped and that he now expected the government to see to it that he should still make \$400 per month. Of course such an argument is fallacious and unreasonable—just as unreasonable as similar claims if made by employers that they built and equipped their works at the request of the government for war service and that now that the war is over they expect the government to keep their works going.

We have already heard of the just decision of the United States Steel Corporation to make no reduction now in labor prices, but to make a moderate reduction in the price of steel. Manufacturers have been making from 10 to 50 per cent profit. They can well afford to lop off some of this in the future and to do it without calling upon labor to share in the reduction. After substantial reductions have been made in profits, because the war is over and prices should fall, it is not unreasonable to suppose that labor will then be willing to do its part in meeting the situation.

It is a common error to suppose that low cost of labor means low cost of product. What is needed, and what we have to a large extent now, is effective labor—labor that produces in proportion to what it is paid. That effectiveness is so great that it has been estimated to be two or three times superior to the labor of Europe. The ending of the war and the bringing about of a surplus of labor, through the release of men from the army, through the cutting off of incompetent workers to give place to better ones, and through a relief of the pressure to produce a large output, are likely to increase the efficiency of labor per unit of product. This means that manufacturers can afford to make some reduction in prices to meet conditions, especially if there is to be, as is likely, a reduction in the cost of raw materials.

But the most wholesome and promising outlook of all is that capital has taken a new view of the labor situation. Instead of the old idea of master and slave, followed by that of owner and servant, we are now entering a period of brotherhood in industry. The employer is now striving to look at things from labor's point of view. He realizes that those who spend one-third of their lives

or more on the floor of his works should really have something to say about the conditions that exist there. We have seen of late the encouraging spectacle where employers of labor, through organizations and through boards of trade and chambers of commerce, have adopted resolutions of a conciliatory nature toward the workers. The most striking instance of this is a recent report of the Committee on Industrial Relations of that old Bourbon organization, the New York Chamber of Commerce. This committee reported, and the chamber unanimously adopted the statements that the chamber wishes to go on record as favoring close association of wage-earners, managers and capitalists in all large industrial establishments, the formation of representative committees for adjustment of disputes, and as advising that wage-earners, managers and capitalists be brought into direct contact with each other in solving labor problems.

If we agree that our industries are keyed up for service, that they are in condition to produce on a large scale, the question naturally arises,—who is going to buy the goods? It will not do to purchase only for stock. We must look for markets. Where are they and how are we to secure them?

In the first place, the war has produced a vacuum in the stocks of the world. So much of the product of industry has been turned to things that have been destroyed that little attention has been paid to producing and enlarging normal stocks of goods. Furthermore, there has been little activity in building operations, new construction, repair work, etc. Economists tell us that in times of peace the stocks of the world, such as steel, coal, oil, dry goods, boots and shoes, etc., are about equal to one year's supply. In other words, if production should stop, there would be enough on hand to supply the needs of the world for a year. If this is true, and of course it is only partly true, there is much work ahead of us in simply putting our house in order.

But the vision which the ending of the war presents to America is a broad and alluring one. There are not many great industrial nations in the world. America is one of the largest. The others, England, Germany, and to a lesser degree France and Italy, are either incapacitated or handicapped. America is free from damage to either her finances or her industries. America, through her entrance in the war, changed the sentiment of the world to-

ward the war from one of conquest and territorial acquisition to that of service, of justice and fair dealing. We went in to serve humanity, to see that the individual, as well as the nation, got its rights, not alone in its own country but throughout the world. This has established good will,—a thing which every business man knows is worth as much and even more than property. I have known of large concerns in business that have gradually gone down hill—some of them to bankruptcy—because they lost their good will. Good will is something which is not easily attained. It is seldom acquired except through a large period of service. Here we have a situation brought about by the war in which America's good will has been established, as it were, over night. We have seen this in many ways. Our men in arms are received with cheers everywhere, even in Germany; our President has been called the George Washington of the Czecho-Slovaks. All this means that the avenues of trade are open to us. How do we propose to take advantage of such a situation?

Let us be careful that we do nothing to mar this feeling of friendship and esteem, let us see to it that in trading with the world we seek to sell first what our customers need and want most and not what would bring us the largest margin of profit. This is a new spirit in trade. No nation of the world has ever followed it. The greatest industrial nation—England—with all her liberality, with all her civilization, and with all her power, has pushed British trade throughout the world with a spirit of profit and with little recognition of the higher virtues of consideration and co-operation with others. Germany, differing radically from England, has pushed trade by dishonest practices. Her course has been that of the brute. The money of the state has been used and the people of the state have paid for it, to push her products against all economic conditions, regardless of cost, for the purpose of making money through her banks and establishing business for her industries.

TRADE DEPENDENT UPON LARGE BANKING CONNECTIONS

It is a new idea, I say, but a very practical and paying idea, that America should seek to trade with the world in the spirit of service. We have seen how unpopular Great Britain has become because of her aggressive methods of trade. We have seen the

destruction of Germany because she did not play fair. We have the field open before us. We shall soon have a merchant marine sufficient to trade with the world. We know that the building up of our own natural resources during the past fifty years has been the means through which America has grown rich. Our time, energies and money have been so occupied at home that we have given little attention to foreign business. Now is our opportunity. South America alone is larger than the United States, is more undeveloped than we were fifty years ago. France, Belgium, Russia, have suffered to the extent of billions of dollars. We have an opportunity to restore them. We have a further opportunity to improve their harbors, to develop their natural resources, and to do exactly what we have already had experience with at home. To do this well calls for all that is best within us, morally and intellectually. To do it thoroughly means banking connections on a large scale. It means that we must go personally to foreign countries and get personal contact with the people there. We cannot expect to be paid in gold, because most of it is in America. We cannot expect to be fully paid in return goods, because the volume of trade should be largely one of export.

There is only one other way left for us and that is to seek and cultivate credit abroad through investment in foreign securities. In other words, we must build with the credit of the people whom we are serving and with our own money invested in their industries. This is not so difficult as it appears. When the war began only some three hundred thousand Americans were bondholders. Today the number has reached twenty million. The American people have been educated to buy bonds and securities. We must educate them still further by showing them that it is clearly in their own interest that America should do a world business.

President Wilson said to me but a short time ago,—“I am not so much concerned as to whether we shall have good business after the war. The thing that concerns me most is whether or not the American people will be able to stand that great prosperity which is in store for them.”

Some Thoughts on Our Shipping Policy

By HON. BAINBRIDGE COLBY

Member United States Shipping Board

THE question of the nation's policy with regard to shipping is not for the Shipping Board to decide. The Board may make recommendations. It may state opinions, deduced from its studies or from its experience. But the formulation of a policy rests with Congress, and it is for Congress to say whether the large and growing merchant fleet shall be operated by the government or by individuals as agents or lessees of the government, or as purchasers from the government. The Board is a branch of the executive power, and under the directions of a statute passed by Congress has called into being a strictly emergency fleet. The total number of vessels constructed, equipped and put into service under the Board's direction from August 1, 1917, until November 23, 1918, was 519 vessels, of a total tonnage of 2,867,000. The additional vessels which have since been delivered into service will bring the total of new construction up to approximately 3,300,000 tons by January 1, 1919.

THE SUCCESS OF AMERICAN SHIPBUILDING

The grim necessities under which this task was undertaken have been met. The effort of the enemy, with its indiscriminate program of sinking merchant vessels, has come to naught. Its effort to paralyze communication between the Allied nations failed. This failure has been largely the result of America's great contribution to the world's successful effort to construct and restore tonnage faster than it could be destroyed.

A fair appraisal of this success can be made only if the fact is kept in mind that shipbuilding and ship management had become almost an alien industry to our people. So blind and ill-informed had been the course of legislation in this country for sixty years that America's proportion of her own foreign commerce, carried in her own ships, fell from a percentage in excess of 90 to 8 $\frac{1}{2}$ per cent shortly prior to the outbreak of the European war. When the great crisis overtook us, we were confronted by

the necessity of creating, on an unprecedented scale, a new industry. We built the best ships we could, in size and type, with the ever-present duty before us of making everything subservient to quantity and speed in production.

The armistice found the shipyards of this country rapidly growing in efficiency and in the rate of output. We were making shipbuilders as well as ships. We were approaching the peak of production. And now, with the passage of the great emergency, we are in a position to take an inventory of what has been done, and to review and in some respects recast our program to meet the criteria of sound business and of competitive operation, instead of considering solely the emergency and the stern but simple measures necessary to cope with it.

Our ships are of good design, the greater number of them of sufficient carrying capacity and speed to make them highly efficient instruments of commerce. It is true, however, that we have built a considerable number of ships of relatively small carrying capacity, whose utility in commerce is qualified by that fact. These smaller vessels can be used advantageously only in coastal or insular trades where their carrying capacity will not be greatly reduced by fuel carrying necessities. In addition to the ships completed, upwards of 12,000,000 tons of shipping are either on the ways, far advanced toward completion, or under contracts which cannot be cancelled except at a great sacrifice of values. What shall be done with this fleet? Although it is authorized as an emergency fleet, it is a merchant fleet none the less, of important extent at present, and of very much greater dimensions in prospect.

I have a personal opinion on the subject. It is the reflection of opinions entertained by many men who have given their lives to the study of shipping problems, and who have achieved large success in shipping operation. I do not, however, offer it as an official expression, but it is high time that sober thought is directed to the subject, and what I say may aid in crystallizing a sound public opinion.

SHALL WE HAVE GOVERNMENT OPERATION?

My personal view is against government operation of our merchant fleet. The business of ship management, the expert grasp of domestic and overseas market conditions, the shrewd sense of

trade, presuppose personal initiative and require individual enterprise. A public administrative body could hardly meet such requirements on a small scale, much less on the unprecedented scale that operation would assume if applied to our large and growing national marine.

It has been suggested that the government operate its merchant marine for a limited period, availing itself of the high freights which the war has established and which will not instantly decline to normal levels now that active military operations have ceased. The theory underlying this suggestion is that the government can in that way amortize the excessive war costs of construction and reduce the value of its fleet to a point within the resources of prospective purchasers, and to a level more nearly approaching post-war commercial costs than the high book cost which our ships represent at the moment. This proposal has logic and some measure of attraction. But I incline to the opinion that a failure to achieve the larger commercial objectives through such an extension of the period of government operation would more than counterbalance, by its indirect losses, the immediate gains through government operation. The management of a ship, the selection of cargo, the hunt for markets, the study of customers' wants, the nice calculation of loss and gain, the intricate problems of routing, with the delicate interrelation of all these factors, demand as an indispensable factor in the right solution of our shipping problem, the element of personal ambition and individual interest.

There is still an important government function which nothing can supplant. We should both build and operate, but not as a general policy; merely in my opinion as a stabilizing and contributory function in the upbuilding of our merchant marine. We should build a substantial number of ships, with the view of stabilizing work in our shipyards, and bringing about that sustained and steady demand for tonnage of standard type that would enable our shipbuilders to reach the low costs without which the industry cannot be kept alive, and incidentally attaining that proficiency in the craft of shipbuilding which is a vital element in the problem of costs.

As to operation, the government may well undertake the pioneering for new trades, and by its own operations, pursued

judiciously and not in any sense competitively with our own ship-owners, establish regular lines for freight, with fixed schedules of sailings. This work, in fact, the government must undertake, to a large extent absorbing the initial cost, which will be justified by the large benefits flowing to the nation's trade as a whole.

Only when the nation's shipping is recognized as a national asset, not the exclusive concern of any one section of the country nor a source of enrichment to any special class, will we approach this problem with enlightenment. The test of any policy is not the profitableness of the immediate operation, but the benefit to the nation's trade and commerce as a whole. The merchant marine is the delivery system of the nation's business, and our shipping policy must seek its vindication in the widening of our commercial field, in the multiplication and diversity of our undertakings, and in the deepening of the foundations of our national prosperity.

The Industrial and Commercial Outlook

By HON. H. A. GARFIELD

United States Fuel Administrator

I HAVE not, during the past year, accumulated a fund either of cynicism or skepticism. I still believe in my fellowmen, and I still look upon the public of America as properly interested in and at reasonable and proper times given to chastening duly their public officials. All of which makes me believe more in democracy than I ever did before. It leads me to recognize that representative democracy is not a failure.

When I left college I entertained the belief, shared, I suppose, by a great many young men, that the world needed reforming, and that we were going to reform it; I believed also that public officials were running things to suit themselves while the people went about their several tasks indifferent to the public welfare. The experiences of the last year convince me that I was mistaken.

While it is my purpose to speak of the outlook rather than the look-back, I venture to give a single illustration of what Mr. Miller has had to say¹ concerning increased productive capacity.

In the production of coal there were engaged in pre-war times a great army of men, perhaps 750,000 of them throughout the country. When one has looked at the reports of previous years, it has been with amazement that the amount of output of coal per person was so small. It was also surprising that the number of days during which the miners worked was so small. I make haste to say that I do not mention these facts as in any sense an indictment of the miner, for he has labored enough to produce the needed amount of coal. The significant point, with reference to our experiences of the past year is that, with a large reduction in the number of men at work, the total amount of coal produced has exceeded, far exceeded, any record heretofore made.

The ability and willingness of our mine-workers to increase production when the need arises and the call comes have been amply demonstrated by the work of the past year. The coal miner produced year in and year out before the war an average of from

¹ See page 308.

three to four tons a day—the amount depending in each case upon the way in which the coal lies in the ground and the difficulties to be overcome in getting it out; but during this past year in many districts a single miner has produced ten, twelve and as high as thirty-five tons a day. I speak, of course, in these latter figures of special instances, in the former of averages. The two statements cannot therefore be compared. I have not the average yet for this year, but I am sure that we will find a very much higher average per man than heretofore.

What shall we do to assist in the readjustment from war to peace? Shall we follow the advice of those who say, "Cut away all supports and let drop what must drop, at once?" Or shall we pursue a more deliberate policy and gradually take away the supports, or, if you please, the restrictions which have been placed upon business during the past year? I believe the truth is found between the two extremes. The principle generally advocated by the American people is that we be left free, that individual initiative be developed and relied upon in the performance of our several tasks as fully as possible; this seems to us to be the normal way. When, however, in a great emergency the government has found it necessary to step in and interpose artificial but very necessary restrictions upon industry, then a condition of things is introduced that is abnormal, and the query very properly before us is whether we ought not to remove those restrictions with some deliberation. My own judgment is that we may set about the task with too much zeal, that there should be a certain amount of holding back, and yet not so much as to artificially hold prices at the high level. Because, as Dr. Miller points out to us,² if prices are artificially maintained at the high level it will in the end work an injury to our industry in competition with industry elsewhere; and that, of course, must reflect itself in the end by injuring the wage-earner.

THE INDUSTRIAL AND FINANCIAL OUTLOOK

Two points are suggested by the topic, "the industrial and financial outlook." I think of industry as our industry at home. I think of the financial relations here intended as having to do more particularly with commerce abroad.

² See page 320.

The statement made by Mr. Ritchie,³ to the effect that many of the problems we are talking about as though they were new problems having to do with reconstruction or readjustment from war to peace, are in fact not new, but old, is true. And yet it seems to me that in dealing with the industrial outlook, we have presented to us an aspect of the labor question so new and so important—with such a new emphasis, perhaps I ought rather to say, upon the relations of capital and labor—that it presents virtually a new problem, a real problem, one growing out of the experiences of the past year.

The illustration which Mr. Saunders gives appeals to me very much⁴—men meeting with their employes on common ground, the familiar factory ground, or wherever it may be, and considering questions as though they affected all, as indeed they do. We have learned the truth of this during the past year. For example in the Fuel Administration over and over again it has been necessary—some strike pending or operators in some region threatening to put in force regulations that would work an injury to labor—whenever a question of that kind has arisen, that I telegraph to representatives of labor and of the operators to come to Washington. They have always come, and we have said to them something like this: "All these questions that divide you must be put aside. America is at war. You have one thing to do, and one thing only; you have to produce coal from the mines and put it into cars. Now, if you, and if we, be true to the great task that presses upon our people at this time, you will agree with me and put aside your differences." They *have* agreed with me and they *have* put aside their differences, with the result that they have learned how to coöperate, not only in the common purposes connected with the operation of mining, but in the greater common object by which we have all been absorbed during this year.

Government has its proper part in all this. We are learning that the question of capital and labor is no longer a private question in which government has no part. We are coming to see that it is a three-cornered question: Government on the one hand, not owning—that is rather a crude way—but supervising industry;

³ See page 324.

⁴ See page 335.

and on the other hand, labor and capital;—the three coöperating in a common purpose for the benefit of all.

Now, then, one other word as to the second point, concerning the commerce which is international. What is this new stage upon which we are about to enter? It resembles the first in this, —and the President of the United States has expressed it,—the spirit of coöperation is not to be confined to any group. It must be given its full play in the dealings between men at home and between governments in their international relations.

It was said not long ago that the proposals of the Paris Peace Conference of 1916, which advocated war after the war, would work injury to the Entente Allies. The statement was that, if the policy of war after the war were adopted, the coal in German territory could no longer be brought out to the steel plants in Lorraine; and that if that happened there would be great injury to the steel plants in Lorraine, because they would have to go two hundred and fifty miles to England for coal, the French mines being out of commission by action of the German armies, thereby greatly increasing the cost of steel production in the plants around Metz. On the other hand, the coal lying in the German territory is only from fifty to one hundred miles away, and if there were war after war, those coal mines would be cut off from the shipment of eight million, three hundred thousand tons of coal a year, which normally move from Germany into France. This same authority whom I am quoting said: "If you cut that off, the inevitable thing will happen; these eight million tons will move north into the Scandinavian countries and cut off the supply that normally comes from England into those countries, because Germany must sell her coal and will cut under any price offered by England. Germany would be forced, in other words, to dump her coal.

Now, that is a hard-headed practical proposition. By whom was it stated? By pro-Germans? No. It was said by Englishmen. It was printed in a report appearing within this calendar year, by a committee of which Lord Rhondda was chairman, and afterwards Mr. Nimmo, and calling attention to the folly of war after war, so far as the coal trade was concerned.

Similar illustrations can doubtless be produced in other fields. Ever since the days of the mercantile school,—since Adam Smith

gave us a new light upon economic questions,—it has been understood that I do a very foolish thing if I prevent you from producing that thing which you have and I want.

At the present time one of the problems which presents itself to our President and the peace envoys is the question of preserving so far as possible among the nations of the world, the kind of free exchange that depends upon the prosperity of each of the parties to the exchange. That principle is not accepted yet with patience, even when an English committee gives us the illustration and the facts, because we are inclined still to look upon Germany as an enemy. She is technically still an enemy; but we are about the business of making peace,—peace with whom? Peace with friends? No, peace with enemies; peace with the world. And if we carry our purpose out in a sensible way, it will be so carried out that nations will rise in their strength not against nations any more, but in coöperation—in “coöperative competition,” if you like—no longer standing jealously against each other, but coöperating in friendly rivalry to the end that you and I, men and women everywhere may be benefited thereby. The outlook is of vastly improved relations between human beings in their dealings with one another as producers in labor at home and in the great interchanges of commerce and finance the world over.

Some Phases of Financial Reconstruction¹

By PAUL M. WARBURG

Former Vice-Governor of the Federal Reserve Board

AS destruction once begun on the battle field spread its waves until its effects had reached all parts of the world, so the work of reconstruction will involve the whole globe far beyond the centers originally affected; and as the character and extent of the disturbance differ in each country affected, so the word "reconstruction" will have a very different meaning in the various parts of the world. In some it will indicate the physical restoration of the tangible things actually destroyed, in others financial or commercial rehabilitation; in others it will mean the reestablishment of normal levels of living and working—a return, more or less, to pre-war conditions. The last named group includes the United States. Considering the question merely from the domestic point of view, "the movement back to normal" would appear as the main aim and characteristic of our own problem of reconstruction.

Several thoughts, however, will at once occur to us at this point and emphasize the complexity of our task.

First. That the normal of the past is not likely to be the normal of the future, which raises the further question of what that normal ultimately will be.

Second. That between our present level and that of the future there will of necessity be a period of transition—which raises the question of how long or how short it should be.

Third. That both on account of the moral obligation involved and on account of the effect that reconstruction in other countries must needs exercise upon our own future economic and financial development, we cannot possibly consider the problem as a purely domestic one—which raises the question of purchases on credit by foreign countries and the influence of foreign purchases upon the course of prices.

And finally, that the return to the new normal level must not be construed simply to refer to the level of prices and wages, but that it includes the new norm of government influence in business—which raises the question of the restoration of the freedom of individual action and operation, willingly surrendered in the face of war, but held sacred and inviolable in times of peace.

¹ Address delivered at Atlantic City, N. J., on December 6, 1918, before the War Emergency and Reconstruction Congress of War Service Committees of American Industries, under auspices of the Chamber of Commerce of the United States of America.

To sketch the problem in its vast outlines is to acknowledge our inability to treat it adequately even within the limitation of some of its phases. For it is evident that the plan to be applied in grappling with the side issues must depend upon the general policy ultimately to be adopted by the government in dealing with the whole problem. That is the reason why in discussing the topic of financial reconstruction only the obvious can be stated with confidence at this time, while wide room is left open for assumptions and speculations whenever we try to go further afield.

My justification for taking up some features of the financial side of the question is that I believe that by carefully analyzing the problem we may assist in clarifying it, and succeed in disposing of some of the fallacies befogging the issue.

In looking into the future we have as yet no definite landmarks upon which we can fix our range-finders in order to ascertain just where the line of demarkation will lie between the transition period and the era following it. We know, however, whence we came, we know our present conditions as our actual starting point, and it must be our first aim to try to gain as clear a conception as possible of our ultimate position, so that in dealing with the interval and the co-related problems, we may map out a course that will lead us towards that final goal. Let us begin then with the obvious things that we may be able to discern distinctly.

As I look through the telescope into the period following that of transition, I see a United States to which the world at large will be heavily indebted, and to which annually hundreds of millions of dollars will be due as interest on loans extended, in addition to the hundreds of millions due in payment of the raw materials we shall be able to spare for other countries. I see an industrially highly developed country which, with the exception of a limited number of articles, will be capable of producing most of the necessities of life for the consumption of its own people.

I perceive, therefore, a country amply protected by a vast annual international credit balance, a country which by keeping some portion of its foreign security holdings in the form of reasonably short obligations, should be able to protect itself against any serious encroachment upon this creditor position; a country owning a huge gold stock—a country, in short, which need not

give itself any great concern with regard to the task of maintaining the parity of the dollar exchange all over the world.

I do not wish to pose as what the British wittily have termed a "war prophet-er," but I much misread the future if it does not have in store for New York the position of a world exchange center, vying with London as a free gold and discount market. As I see it, our future economic position will be of such strength that it will be difficult for many countries to keep their exchanges at par with us. They are not likely to have sufficient quantities of the goods required by us, nor will they have large amounts of gold to spare, and therefore, in payment of the things we sell them and of the interest they will have to pay us, they will have to try to find something else than goods that we may purchase from them; that is, they will offer us the individual or collective obligations of their nationals, or their industrial enterprises, or such securities or assets of other countries as they control. If we want these countries to continue to be able to buy our goods, it is therefore incumbent upon us to prepare ourselves to grant these foreign credits and to buy and assimilate these foreign assets.

FINANCING OF THE WORLD'S TRADE

In order to carry out this program several things are necessary. First, our banks and bankers must be able and willing freely to extend their acceptances for the financing of the world's trade.

It is inevitable, if our banks and bankers continue to show the same spirit of enterprise and patriotism they have demonstrated during the war, that in the financing of the world's current trade we shall have a very large share. As a matter of fact, we owe it to the world to bear a substantial portion of this burden. To that end the discount rates of the federal reserve banks and the policy of the Federal Reserve Board with respect to acceptance transactions must continue to be liberal. I can well foresee the time when American dollar acceptances will be outstanding to the extent of more than one billion dollars in credits granted all over the globe.

Three years ago, when it was my privilege as a member of the International High Commission to visit South America; I found that the banks in that hemisphere hardly realized that there existed such a thing as dollar exchange or an American bankers'

acceptance, and our own banks and merchants had to be coaxed into using them. Now these acceptances are well known and eagerly sought all over the world.

And as our banking power and machinery develop, there unfold new opportunities for foreign branches of American banks. There are today about fifty branches of American banks in foreign countries, besides a considerable number of affiliated banks and sub-agencies largely in Latin-American countries, and more are being opened every month of the year. The Federal Reserve Bulletin in its recent numbers has given the fullest data concerning the operations of the banking institutions engaging in these foreign enterprises. They are covering at present almost every country in South and Central America, they have penetrated the Philippines, Japan, China and India, and we find them established in England, France, Italy, Spain, Belgium and Russia.

But while much has been accomplished as a beginning, while the marvelous strides that our banking system has made during the war are as unparalleled as the rapid creation, equipment, training and transportation of our armies, more remains to be done. While it is most satisfactory to note that several discount companies and acceptance corporations have been organized, it is my belief that the future will show a very distinct need for a larger number of acceptance corporations.

As the liberty loan bonds are absorbed by the public and as the paper secured by these bonds and rediscounted with the federal reserve banks is liquidated, the enormous resources of the Federal Reserve System will become available for regular investment in bankers' acceptances to a larger extent even than in the past, and will prove a tower of strength, protecting our discount market at rates which will compare favorably with those of the strongest amongst the old established countries.

These conditions are likely to bring about a constantly growing demand for American acceptances, and I hope that not only banks and acceptance corporations but also private banking firms will energetically cultivate this new field of enterprise. As is well known, private bankers were pioneers in England in developing the foreign acceptance in business.

The war being over, it is now the privilege of our bankers and

financiers to make themselves generals in the arts of peace, and to call out as volunteers the best talent, now happily again available, for the constructive pursuits of commerce and trade in all parts of the world.

There is in this call no challenge to England; she will, I am certain, retain her logical and traditional position of a world center of commerce and finance. Moreover, once we return to the time when trade between nations is no longer financed by the issue of government bonds, the old machinery of bankers' acceptances and investment banking will be so heavily taxed in both countries that England and the United States, soon to be joined, we all hope, by France, will be only too glad to find partners with whom to divide the burden and, rather than envious competition in securing the load, there will be a tendency of wishing to place a fair share of it on "the other fellow." No doubt some of the neutral countries, whose financial strength and independence have greatly increased during the war, will play an important rôle; while Germany's place as an international banker will have to be considered as vacated for some time to come.

Bankers' acceptances, however, while important factors as temporary equalizers of international balances, and invaluable, furthermore, in their incidental effect in creating centers into which other commercial and financial transactions will naturally flow, cannot be expected to offer the proper medium for settling the vast permanent indebtedness to us which we expect to see accumulating from year to year. These large balances must be offset not by temporary credits but by an outright transfer to us of foreign assets. This may be brought about essentially in four ways:

1. The debtor country may sell to our government its own government obligations (our government in turn financing itself by the sale of United States Government bonds substantially in the same manner as adopted in financing our Allies during the war). Or
2. The debtor country may sell to our investors (instead of to our government):
 - (a) Its own government obligations, or
 - (b) Industrial stocks or bonds originating within its own boundaries, or
 - (c) Stocks or bonds owned by it but issued in other foreign countries.

The first method is not likely to be employed extensively beyond the beginning of the transition period. The other three

methods are the ones that in the long run we may expect to see develop as the most practicable forms for which we must prepare ourselves.

In order to bring about in the United States the successful absorption on a large scale of foreign securities, it is necessary that our investing public be educated properly to appreciate these foreign investments. That will only be possible as our banks and our business men going into foreign countries bring back to the "folks at home" frank and reliable information concerning the risks and chances of the proposed investment, concerning the resources of such countries, the character of their people and their political and economic conditions.

Intimate commercial relations with foreign countries create the atmosphere of understanding, interest and sympathy which alone renders possible comprehensive international financing; and inversely it is such financing that encourages the growth of trade relations. There is a relationship of close mutuality between business man and banker in this respect. For the fullest success one is dependent upon the other, and the country at this juncture depends upon both. To go out into the world, to study foreign conditions, to open new avenues of commerce and finance and to develop in this country a group of men whose word and judgment with regard to foreign enterprises we shall willingly trust, is a national enterprise that should appeal to the ambition and public spirit of the ablest of our coming bankers and business men.

In times of temporary adverse trade conditions or unexpected emergencies, the ownership of foreign securities is moreover of the greatest value to the country. We need only to think of the invaluable source of strength they proved to England during her hours of trial. I believe we may safely say that it was the use of these foreign holdings (North American and others) that enabled England to finance her own foreign purchases and those of some of her allies without breaking the rate of exchange of the pound sterling during the first period of the war. But from this episode we should draw the lesson that the advantage of holding foreign securities consists in no small degree in the ability of selling them in several markets, and in creating a market here for foreign securities we ought to remain mindful of that fact.

Before 1914, the large holdings of American securities in Europe and their wide market on both sides of the ocean furnished an important instrument for equalizing temporary debit balances by the so-called "arbitrage" of securities. The back flow of our own securities must have destroyed very largely these economically important pre-war conditions. We can well imagine that government bonds with international markets will play an important rôle in restoring the basis for an easy exchange of securities, that is, a healthy trans-Atlantic bond arbitrage. In going into these new fields of foreign investment and trade, let us start out with a generous, sympathetic and receptive mind; with open purses—but also with open eyes and conscious of our serious responsibilities in the matter.

It is unfortunately true that wherever the faithful pioneer goes, there also migrates the crook. In opening the markets to foreign financing, almost every country fell victim to the occasional robberies perpetrated by reckless promoters. The local knowledge of American business men and bankers living in these foreign countries may prove an invaluable protection in scrutinizing these propositions. But, if I may be permitted to express my thoughts in the premises, I believe that for the better protection of both the public and the careful and self-respecting banker, it would be advisable to establish some generally accepted rules governing the information to be contained in a prospectus offering for sale foreign securities. Every great international market enjoys such rules, established either voluntarily by the stock exchanges or by the government.

If we are to be a world center of finance, as I am profoundly convinced we shall be, I believe we ought to take steps that will give to the American prospectus the same standing and prestige as is enjoyed by those of the leading European markets. I can well imagine that by common and voluntary agreement some sort of a future capital issues committee might be organized in each federal reserve district to give its stamp of approval to every such prospectus before the quotation on the stock exchange be granted or the offer be made.

Such approval would not signify the passing upon the intrinsic merit of the security involved, but it would give assurance that all essential facts, and nothing but authentic information, be

contained in the prospectus and that they be stated over the signature of the borrowing government or corporation and the issuing house. This is, as a matter of fact, no more than a responsible issuing house would observe. It would be a burden, therefore, only upon less conservative firms, upon which a check ought to be exercised. While, no doubt, some red tape and delay would be involved in such a proceeding, it would in the long run prove well worth while to submit to it. The chairman and governor of the federal reserve bank of the district might be invited to head the committee, as at present. They and others would, no doubt, be found willing in the general interest to shoulder the burden.

When the present Capital Issues Committee in due course, by the expiration of the act, discontinues its operations, it is possible that such new local capital issues committees might exercise a very important function in protecting the country in this further respect: Issuing houses in Europe do not generally enter into contracts for the purchase of foreign securities without first inquiring at their headquarters whether or not such issue is in the public interest. It must be borne in mind that when concluding these loans not only the relationship with the borrowing country must be considered, but also the condition of the purchasing country as a whole. Excessive foreign loans may at times adversely affect the entire network of trade balances, exchanges and interest rates, even though the transaction may be of great advantage to particular industries, and even though the contracting country itself may be heavily in our debt. The situation as a whole, therefore, should be carefully weighed in such cases by the Federal Reserve Board which, when approached through the local capital issues committee, would give its advice.

It may be timely to point out in this connection that foreign bonds payable in several currencies would prove of great value in times when gold exportations might become imminent in consequence of unexpected temporary financial dislocations. In such circumstances interchangeable international bonds could well be sold abroad in order to replenish our foreign balances, warding off to that extent exportations of gold.

In sketching this program for the future we cannot be unmindful that in certain important respects it will not meet our imme-

diate needs, because it will take time to develop in the United States as wide a market for foreign securities as is here contemplated, while most urgent demands by foreign nations are near at hand. We know that almost all European countries for a prolonged period will require food, or steel, or copper, or cotton, or machinery with which to rebuild their life and industries. Many of them at present have neither gold nor goods with which to pay us. Individual and banking credit in some cases has been seriously affected, and in others has not yet had sufficient time to establish or reestablish itself. Without doubt we shall consider it our proud privilege to give whatever we can spare to those that deserve our aid, particularly to those who, like France and Belgium, have an undoubtedly valid moral claim on us, and to that end we shall have to continue to reduce our own consumption to the necessary degree.

It is at this point of our consideration, however, that our ship strikes a fog bank and that we shall have to feel our way in the mist as best we can. There are quite a number of factors about which, for the time being at least, we are uninformed. We do not know whether during the transition period Congress is going to authorize advances by the United States to foreign countries in order to provide the means with which to pay us for their purchases of foodstuffs or other necessities. At present the symptoms point the other way.

If, however, the government itself is not going to finance the sale of these goods, the volume of such foreign purchases is likely to be reduced or at least delayed so as to synchronize with the amounts of dollars that can be raised here by the opening of temporary banking credits, or by the free sale in our market of foreign government bonds or foreign assets. In that case our exports are likely to move at a slower pace and there is less likelihood of a congested demand for goods for export, and therefore, prices are likely more promptly to find their own natural level.

Conversely, should the United States Government decide to advance the amounts involved to the purchasing nations, greater immediate stimulation of certain export industries would follow, coupled with the resulting possibility of continuing for some time at least the exercise of a certain control of prices and distribution, thereby causing a more gradual decline. Of the two courses our

first impulses, I believe, would make us choose the latter. Closer study is likely, however, to gain our support for the first of the two methods.

There is much to be said in favor of a quick return to the natural basis. While it must be conceded that unhampered development may temporarily produce a greater shock, we must bear in mind that on the other hand trade and industry are unlikely to proceed at full speed until there prevails a general and confident feeling that a natural solid basis has been reached. What would be gained by governmental assistance to our foreign purchases would be lost, therefore, by the creation of a sentiment of reserve and hesitation caused by the hot-house atmosphere.

Moreover, now that the war is won, we cannot blink the fact that impatience is general to shake off restrictions and bothersome regulations, and there is grave doubt as to whether an effective control of output, distribution and prices could be continued any longer. While the cushioning of the shock might appear very desirable on account of its bearing upon unemployment and wages, the fact must not be overlooked that by the systematic and wise curtailment during the war of expenditures for maintenance and new constructions, for necessities and luxuries, we have now happily stored up a reserve purchasing power which, together with the natural foreign demand, should prove a very efficient shock absorber.

These conditions would not appear to warrant the fear of the imminence of very drastic convulsions in the labor market. But even a temporary jolt should not frighten labor, provided that there results a prompt establishment of a solid basis on which business can develop healthily and freely. Weighing all pros and cons as far as we are able to see them and realizing that requirements may differ in the several branches of industry and trade, it would seem that on the whole the evidence favors an early withdrawal of the hand of government in regulating production and prices.³

The policy indicated by the Treasury of prompt liquidation of government contracts, even though compensation for cancellation

³ I am not including the activities of the War Trade Board, whose control, in certain respects, may have to be continued until the free use of shipping facilities will be restored to our trade.

might involve large sums, appears most advisable in the circumstances. Prompt payment by the Treasury of all such obligations would ease very materially the general situation and it would enable industry to clean the slate rapidly and thoroughly and get ready for the new business that knocks at our doors. The above is stated with the greatest possible hesitation by a skipper who knows full well that he is in a fog, but who, having recklessly agreed to discuss this topic, has no choice but to go ahead on the best observations and soundings that he is able to make.

But whether or not our assumptions be correct, in trying to survey the field of our future financing, we may take it for granted that, should our government cease to make advances to our Allies, some of them are most likely to offer for sale in our market their own government bonds or notes, or their industrial properties. I feel certain that vast amounts of the obligations of our strong friends will find a cordial reception here and will be readily absorbed; but taking it all in all it appears extremely doubtful whether our investment houses will find it possible to place foreign securities on a broad enough scale to meet the large foreign requirements for our goods. The task will be made all the more difficult, because, as some of these countries have just passed through a period of unrest and great financial strain, we may expect the investor to insist on some evidence that new political conditions have come to stay and that he may rely on an undisturbed economic development before he risks his money.

On the other hand this period may offer great opportunities for the acquisition of most valuable foreign properties. Some nations, particularly those with strong credit, might possibly prefer sooner or later to dispose of some of their national securities or assets rather than to increase their indebtedness to us by the acceptance of further loans; other countries may have to sell in order to pay their debts because their national credit has been destroyed. From the business point of view it would obviously be to our advantage to buy assets of this sort (or, as the case may be, to make advances secured by such assets with an option to buy them) instead of taking an unsecured long-term foreign government obligation.

It is evident why, in the long run, it is more desirable for the United States to acquire the electric light and power plants,

telegraph and telephone lines, railroads, mines, or other industrial plants, than to advance to others the money with which to carry these properties; for whoever owns and controls these foreign plants is most likely to secure for his nationals the orders for raw material and manufactured article that go with their upkeep and development. Regular orders of this nature have shown themselves to be a most valuable nucleus around which further business crystallizes.

It is estimated that England, France and Germany before the beginning of the war invested annually an aggregate of over a billion dollars in foreign countries. For more than four years countries like the South and Central American republics and China have not been able to secure foreign funds in substantial amounts, and while the war has taught them the necessity for a greater degree of thrift and more extensive reliance upon their own resources, their accumulated appetite for foreign capital must now be large.

Add to that the demands of European nations, new and old, and it will be clear that by sheer force of circumstances, even though England, France, Holland, Japan, the Scandinavian countries and others will take their full share of the burden, we shall soon be driven into a position of great importance in international finance, and that this responsibility will be facing us long before we may expect to see our market for foreign securities develop far enough adequately to meet the situation.

I believe that so-called "investment trusts" will ultimately play an important rôle in solving this problem. Companies of that character are well-known in England, particularly in Scotland. As their name indicates, they invest their funds in foreign securities and against their assets they issue their stocks and bonds for sale in the home market. One important corporation of this description has been launched in the United States, the American International Corporation. More such companies, I think, are bound to be created, but it will take years to establish their prestige and standing all over the country and to prepare for their securities an investment field wide enough to fill our needs.

PLANS FOR A PEACE FINANCE CORPORATION

In these circumstances, it occurred to me some time ago that by converting the War Finance Corporation into a peace finance corporation and authorizing it to acquire directly, or make advances on foreign securities, we might create an instrument that would promote our foreign trade and at the same time greatly assist foreign nations in need of our support during a period of political and economic transition. Such a peace finance corporation, enjoying the prestige and strength flowing from the \$500,000,000 capital subscribed by the United States, could exercise effectively its power, within certain limits and for a limited number of years, to issue its own obligations against the foreign securities acquired.^a In doing so it might render services of the very greatest value in bridging a critical interval. At the same time, it would keep the government out of direct touch with business transactions, with which, for a thousand obvious reasons, it had better remain unconnected.

For the sake of both our domestic and our foreign problems, I believe a plan of this kind is deserving of our most careful consideration, even though I am reluctant to suggest it because of my strong belief that at this time we should remove rather than construct war emergency machinery that draws government into business and on account of other serious and valid objections which at once occur to us.

The greatest difficulty, and one that cannot be weighed too conscientiously, is that of devising a plan which will provide a sufficient assurance that we may rely on securing men able, expert and independent enough to be entrusted with the administration of funds amounting to possibly billions of dollars, men who would have to be vested with wide powers in dealing with what, in effect, would amount to the people's money. In order to win the war, and while it lasted, we were willing to concentrate such powers in the hands of a few. Would Congress be prepared to go that far for purposes of reconstruction? That is doubtful, and personally I believe that, in spite of its obvious necessities and advantages, the step, involving as it does transactions with

^a These obligations should not be eligible as collateral for notes rediscountable with federal reserve banks. They should be placed only as fast as they can be absorbed by the investors.

foreign countries, could safely be undertaken only if we could remove every reasonable doubt with respect to our ability of securing the proper men and of keeping the corporation's management so separate and distinct from the direct responsibility of the government as to protect both the government and the corporation from any embarrassment likely to result in dealing with foreign nations.

A solution might be found by providing that the peace finance corporation should be administered by a board of directors, of whom one each, with the approval of the President, would be designated by the Secretary of State, the Secretary of the Treasury, the Secretary of Commerce, the Federal Reserve Board, the War Industries Board, the War Trade Board, the Shipping Board and the Food Administration (each selecting at the same time a substitute director for their appointee). These directors then would elect the general manager and other officers.

A method of this kind would be likely to secure a non-partisan expert administration: a majority would be appointed by non-partisan expert men of national reputation and of widely divergent interests. I think a board of that kind might safely be entrusted with the necessary wide powers; it would embody all the elements that are at present charged with the duty of regulating commerce and finance, particularly in their relation to foreign countries. In case of vacancies occurring after one or more of the appointing boards had ceased to exist, other boards such as the Federal Trade Commission and the Tariff Board might take their place, or the Board of the Peace Finance Corporation itself might be empowered to submit to the president names of candidates. There may be many better ways of appointing the board; the above method is suggested simply for the purpose of submitting an illustration.

In many foreign countries there are men now on the ground, serving as emissaries of the Department of Commerce, or as representatives of the Treasury, or acting in connection with the business operations of the army and navy or the American relief organizations. Would it not be possible to constitute from men thus available abroad and the best men qualified in the United States, advisory commissions to cover each country, not only in Europe but also in South America and Asia? These men might render invaluable services to a peace finance corporation, and

ultimately they would become important factors in creating in the United States the atmosphere of knowledge and understanding of foreign conditions so important for the development of our future trade and finances. At the same time it will be very desirable to have available in some of these countries groups of men who will keep an eye on the proper distribution of goods furnished by us.

Whatever form of financing, however, the reconstruction period may bring, whether securities issued by our own government, or by a peace finance corporation, or by foreign governments or foreign corporations, it is certain that their successful absorption will depend upon the saving capacity of our people. I believe we cannot emphasize too strongly that the time has not yet come when our people may relax their efforts to curtail unnecessary consumption, both for the sake of releasing for export the greatest possible quantities of goods, thereby stimulating our export industries, and for the purpose of accumulating funds available for investment. The slogan "don't stop saving food" would gain in scope and strength by abbreviating it into "don't stop saving!" Our more than twenty-one million liberty bond holders must be trained to become permanent investors; thrift must become a national virtue, a priceless inheritance left to us by the war. The splendid saving mechanisms now in use should be continued and expanded; they should not be permitted to die out when government borrowing ceases.

It is most important that our coming victory loan be absorbed so far as possible not by bank borrowings, but by genuine savings. Thanks to the strength provided by the Federal Reserve System, our banks have been able to meet the strain of the war in a most admirable way, and, as in every previous loan, they will be found prepared for whatever burden the next loan may bring.

But do not let us be unmindful of the fact that since our entry into the war the reserves of the federal reserve banks have fallen from 85 to about 50 per cent; that the aggregate investments of federal reserve banks have increased in that period from \$225,000,000 to over \$2,300,000,000; and that the proportion of national banks' investments to deposits at present amounts to 130 per cent against 110 per cent at the beginning of the war in 1914.

GOVERNMENT BONDS AND WORLD-WIDE INFLATION

We are near the crest of the wave of world-wide inflation. As it was generated and fostered by a chain of interlocking effects and reactions of extraordinary demands for certain goods, reduced power of production of others, rising prices, rising wages, vast issues of government bonds and circulating notes, so with the approaching end of the issues of government loans we may expect to see the beginning of a gradual contraction of note-issues and deflation of prices and wages⁴ and a return to more normal conditions of production and consumption.

So far as the banking situation is concerned, deflation will have to be brought about primarily by the people's efforts to save and by a contraction of loans following the shrinkage of prices of goods and reduction of the volume of inventories. On November 8, the 751 member banks in leading cities submitting weekly reports to the Federal Reserve Board held \$1,200,000,000 of loans secured by government war obligations in addition to \$1,806,000,000 of government securities (exclusive of \$268,000,000 deposited for the issue of national bank currency), making the total holdings by these reporting member banks of government war obligations and paper secured by such obligations in excess of three billion dollars, of which a substantial proportion was pledged as security for loans obtained from federal reserve banks. On the same date the amount of this class of paper which the federal reserve banks had discounted for their members aggregated \$1,317,000,000.

The government bonds held by the banks ought to be absorbed by the public as fast as possible and the expanded position of both member banks and the federal reserve banks correspondingly lightened. Depositors by turning into investors would reduce our deposit structure, which from the beginning of the war in 1914 has risen from \$21,330,000,000 to about \$32,000,000,000, and thereby decrease the banks' reserve requirements. This in turn would have the effect of reducing the re-discounts made by member banks in order to provide the necessary reserve balances with federal reserve banks.

⁴ Wages control prices and prices control wages; they have to move together. I cannot but believe that Mr. Gompers had in mind in his recent speech the preservation of the relative position of wages; that is, their purchasing power (based upon index numbers or what is spoken of as real wages, as distinct from nominal wages). Any other thought is an impossibility.

While it is possible that the aggregate of investments of the federal reserve banks will still rise in consequence of the payment of the installments due on the fourth liberty loan and the victory loan to be expected in the spring, we must hope that the peak may be reached in the near future and that from then on we may witness a continuous and substantial decline in bank investments and a corresponding rise in the percentage of reserves.

Nothing could be more beneficial to the prestige of the United States as a world power in finance than the early and courageous lifting of the gold embargo. It is true that before contemplating this step, it will probably be necessary to have an ample tonnage at our free disposal for the unhampered transportation of our goods (and other conditions will have to be considered which it would lead too far here to discuss), but it is also true that the stronger our gold reserve at that time, the more readily will we be able to envisage with complacency the probability of the consequent exportation of sums of gold which, conceivably, may amount to hundreds of millions of dollars.

It is for this very important reason that it is sincerely to be hoped that the people by saving and curtailment of unnecessary consumption and expenditures, and that the business community by a program of wise moderation, particularly dealing with non-essentials,—and as long as this can be done without creating unemployment,—will do their share in consolidating both our gold and investment strength, on which two factors, our ability to secure our proper position in foreign lands and our power to act boldly and generously in dealing with other nations, are largely predicated.

Over-expansion of deposits and note-issues must not be permitted to tie up our reserves to such a degree as to interfere with our power to let gold go out freely. While we are still in a position of great strength, we must remain conscious of the necessity of not forgetting our limitations.

If by the exportation of large amounts of gold or a continual increase of investments our Federal Reserve System's cash reserves would fall from 50 to about 40 per cent, that by comparison with other countries would still look like a very high reserve. Do not let us forget, however, that in Europe reserves before the war were considered to be near a normal level at approximately 60

per cent, and that that was at a time when central bank countries were saturated with gold, owing to the hundreds of millions in actual gold carried in the pockets of the people, while now this important secondary reserve has been wiped out in almost all leading countries. They have wisely concentrated that gold in the central banks in order to have it serve as a basis for their vastly increased note and deposit obligations. Logically, future central banks' reserve standards ought, therefore, to be higher than those of the past. While we must resign ourselves to the conclusion that it will be a "long, long way" to the realization of any such hope, it is all the more evident how important it is for all countries firmly to envisage this goal of strengthening their present financial position by a gradual deflation, and continued efforts to concentrate all scattered gold.

The world balance sheet has been "watered" by issuing war loans and currency, against things already consumed or of no permanent value, to an aggregate appraised to exceed the estimated pre-war wealth of England and Germany combined. The squeezing out of this water by gradual amortization of war loans and contraction of note issues will prove an important factor in reestablishing pre-war levels of prices.

Some writers hold to the view that increased production of goods rather than banking deflation may bring us back to a normal relation between money and goods. My own belief is that the solution must be sought in efforts from both ends. The resultant line indicating the trend of prices and deflation would then lie somewhere around midway between the highest and lowest points.

Perhaps I should say a word at this juncture concerning the much mooted question of the demonetization of gold as a world medium of exchange. In considering the suggestions made in this connection I have to think of the deaf old lady who, when asked by her table neighbor whether she liked red bananas, answered: "No, my dear, I prefer the old-fashioned night shirt." I confess, when dealing with this problem, that I, too, am old-fashioned. I believe that gold as a medium of actual circulation within the border lines of countries will more and more be relegated to the past; but that as a basis for an elastic circulation and as the ultimate means of settlement of international balances, it will continue to dominate the world. It will not be dethroned for

the reason, if for no other, that such a step could only be taken by mutual agreement between gold debtor and gold creditor. The position of economic superiority held by a creditor country owning a large stock of gold is, however, of so immense an advantage that it will not be voluntarily relinquished by the large number of nations that are the *beati possidentes*.

Nor do I believe that the world has turned far enough into a family of communists seriously to consider the pooling by all countries of their holdings of gold. As long as nations have separate national budgets and obligations, they are likely to wish to retain a distinct ownership of their assets. The problems of reconstruction are immense and immediate; the new structure must be erected on the most solid foundation and built with material that is thoroughly tested and promptly and actually available.

Nor can we deal effectively with the foreign exchange question without first freeing our minds from doubtful theories. We must cling to the old dogma, that foreign exchange will continue to be the result of the foreign trade and credit of each individual nation, the balance, so far as not squared by the flow of goods and loans and securities (including bills of exchange) or bank balances, remaining to be settled in gold. The war, drastically obstructing all these natural currents, brought violent and most regrettable disturbances to the foreign exchange markets. But we have seen that the very approach of the armistice, promising the return of normal trade conditions, turned back our exchange rates towards their fairly normal level.

I do not believe, therefore, that there is any necessity for the establishment by the government of a foreign exchange bank, which has been urged as a reconstruction measure, for the purpose of keeping dollar exchange at par, or our discount rate for bankers' acceptances at $3\frac{1}{2}$ per cent, or for providing the country with adequate foreign exchange and credit facilities at fair and equitable rates. If it should be shown that American banks and bankers are so lacking in spirit of enterprise that our business men, at fair rates of compensation, cannot secure adequate facilities for the carrying on of their foreign transactions, then such banks should be organized.

In that case, however, it should not be a note-issuing bank,

but a plain and unhampered business organization under government control. So far nothing has changed my knowledge and conviction that the foreign exchange business in times of peace is being transacted on the most modest margin of profits, that our American banks, since the shackles were taken off them four years ago,⁵ have moved rapidly into foreign fields and that they may be relied upon to do their share in the future.

Attention has been drawn to the preliminary steps taken by many European nations for the organization of banks designed to protect the foreign exchanges of their respective countries. But the conditions of these nations are not ours. Countries that are dependent upon the importation of goods and at the same time have to find means of annually remitting abroad large sums in payment of interest and amortization have a very real and serious problem on their hands, one from which, happily, we have reasons to hope to be immune, at least for some years to come.

With the vast credit balance annually accumulating in our favor, adverse exchange conditions, barring unforeseen emergencies, can normally be brought about only by excessive foreign investments and these can be adjusted by a modification of our financial policy at home, but not by the operation of a foreign exchange bank. Nor would it have been within the power of such a foreign exchange bank to stabilize our dollar exchange during the war.

It is now well understood that apart from the interruption of our trade with neutrals, the prevailing and regrettable disturbance in our neutral exchanges was largely a question of the use of the proceeds of our loans granted to our Allies, and of other "force majeure" influences which it would lead too far to enter into, but which would have been beyond the power of such a bank to regulate. As stated before, when the seas are open to our unhampered trade and when our foreign loans are under proper control, with our huge gold stock and an effective discount market, our foreign exchange situation can be protected without the creation of a new government bank.

Nor is such a bank necessary in order to put our discount rates

⁵ It was only two years ago that the power was granted to national banks to combine in holding stock in banks organized to do foreign business. The national charter for such foreign banks has not yet been granted, in spite of the urgent and persistent representations of the Federal Reserve Board.

on an equal level with those of London. It cannot be denied that it is an anomaly, which rankles in the minds of some of our critics, that our acceptance discount rate should at present be at $4\frac{1}{4}$ per cent, while the British rate is at $3\frac{1}{2}$ per cent at a time when England is borrowing from us at a rate well in excess of $4\frac{1}{4}$ per cent.

So long, however, as the United States Treasury has to raise about one and a half billions per month by the sale of Treasury certificates at $4\frac{1}{2}$ per cent, it is evident that a reduction by the federal reserve banks of their discount rate to $3\frac{1}{2}$ per cent would only have the effect of inducing the banks and trust companies to sell all their acceptances to the federal reserve banks at that rate, in order to buy Treasury certificates at $4\frac{1}{2}$ per cent, or commercial paper at 6 per cent.

In other words, it would tend to encourage expansion and at the same time destroy the broad market for acceptances which, as a result of the labor of several years, has been developed, with a constantly growing number of banks purchasing these acceptances. The low rate, if adopted, would be likely to make the federal reserve banks the only market. If, on the other hand, the Treasury reduced its rate on certificates to $3\frac{1}{2}$ per cent it would court certain failure in its attempt to raise the vast amounts required each month.

As against these conditions, it may be taken as a fact that the low acceptance rate established in England proved of a very real value to our Ally on account of its bearing upon the British Government's gigantic and highly successful loan operations in the home market. Must we not ask ourselves whether that was not a sufficient compensation for the temporary disadvantage at which we were placed? Was not the common object to be gained more important than the question of the relative position of vantage between allies?

As stated before, we may expect that anomalies of this kind will cease as soon as Treasuries discontinue to issue government loans and when the natural flow of money again dictates the rate policy of the countries under the leadership of their central banks. It cannot take long for a natural adjustment to take place on these lines and we can well afford to be patient in the interval, whether it extends over half a year or even a little longer, during this transition period of reconstruction.

Was it not the redeeming feature of the horrors through which we were passing that for a common aim men were willing to share with one another suffering, deprivation and death? And is it not one of the most inspiring features of reconstruction that a spirit of competition in giving and sharing with one another has come to us to take the place of the one-time spirit of keen competition for possession and position?

IS THE UNITED STATES TO BE THE LEADING FINANCIAL COUNTRY?

In thinking of financial reconstruction and of the financial world of the future, do not too many amongst us have this one thought uppermost in our minds: is the United States hereafter going to be the leading financial country? In other words, are we going to take England's place as the foremost financial power? Do not these men forget that if England were to surrender her entire trade and banking to us we should collapse, and that if we were to unload all our business on her, she would break down under the burden?

The whole truth of the matter is that we have both grown to be pillars supporting the same structure and that neither can fall or become weakened without bringing danger or disaster on the other. England, herself the owner of billions of foreign obligations, will remain the banking center of Europe, a world clearing house for goods and credits. I believe that her banks and ours will be found in close coöperation, sharing the burdens in bond issues and credits, and relieving each other as the tide may swing from time to time.

Personally, I think it is finer and healthier for us not to think so much of the rank as of the responsibility of our position. Amongst nations, as amongst men, it is not prudent to place one's self on a pedestal overtopping the rest. Whoever rises too far above his neighbors ultimately makes himself their target.

Moreover, conditions of too glaring advantage do not remain long without the disproportion being adjusted in one way or another. An over-abundance of capital and material on our part will soon draw towards our shores as an equalizing force a stream of men anxious to divide with us our position of advantage, and surplus capital flowing into poorer countries will help them to develop their own resources. The ultimate course of the process

of adjustment will largely be influenced by the attitude and power of labor, and our future tariff policy.

If I read aright the signs of the times, England and the United States, soon to be joined by France, allies of the past, will be partners rather than competitors in the future—partners not of a close corporation to the exclusion of others: it will be a partnership wide open for any respectable new associate wishing to enter. Or perhaps we might more properly term them joint trustees, with others, administering a great public trust. If there is to be immediate and intense competition between their peoples, it ought to be on this one and only ground: "Who will be able to save most in order to be able to help most."

The ownership of no less than \$8,000,000,000 of foreign government obligations (probably billions more before we are quite through) conveys to the government of the United States the possession of a master key controlling the foreign exchange market for some years to come.

Nobody is wise enough to say today what the ultimate disposition of these foreign bond holdings will be. Some bonds may be actually paid off when due; others may have to be renewed by our government; in other cases foreign governments, when their bonds mature, as a renewal operation may offer their own bonds for sale to the American investor (instead of to our government).

We may assume, however, with entire confidence, that the United States is not going to be a hard and exacting creditor. While our government may find that, as a matter of protection against unexpected economic or political developments, it may be advisable to keep a certain portion of our foreign loans in bonds of a reasonably short maturity, renewable from time to time, there cannot be any doubt that the decisions of any future administration concerning the ultimate liquidation or continuation of these debts will not be reached from mercenary or selfish motives, but that they will spring from considerations of the larger duties towards the world as a whole, and from minds fresh with the memories of the sacred purposes for which these obligations were incurred.

It would unduly tax your patience to give a complete list of the things in which I do not believe, but it may not be inopportune for me to digress here for a moment in order to express the hope

that Congress may see its way clear to exempt from taxation the interest received by foreigners on bank deposits in the United States, or on their investments in loans, discounts or American bills of exchange. Other countries, *e.g.*, England, have imposed taxes on income received by foreigners on permanent investments; but England has never undertaken to tax foreigners on revenues from sources of income which do not constitute permanent investment. England, not only commercially but also financially, is a free trading country, and it is largely to her liberal attitude in this respect that she owes her position as the world's banker.

Petty and vexatious taxation of revenues from bank balances and bills of exchange will result in placing a severe handicap upon American banks in their efforts to give to American paper and American balances the same standing as that enjoyed by their British brethren. Such taxation not only impedes the free flow of money but in the final analysis hurts the American borrower, who will be the one to "pay the piper" by being compelled to stand the higher interest charges which would result. I should earnestly urge, therefore, that Congress examine this question very seriously when framing the revenue bill now under consideration.

Just as I was finishing the writing of this article, there came to my knowledge an abstract of the report of the British Committee appointed to investigate the question of currency and foreign exchange after the war, of which Lord Cunliffe, the esteemed ex-Governor of the Bank of England, is the chairman. It was extremely gratifying to find that the conclusions reached by this committee bear out entirely the thoughts that I have ventured to express in this paper with regard to Treasury borrowings, discount rates and deflation.

The report urges as prerequisites for the restoration of an effective gold standard, "which should be restored without delay":

The cessation of government borrowing as soon as possible after the war, and the provision at the earliest possible moment of an adequate sinking fund for the purpose of bringing about a regular annual reduction of capital liabilities;

A cautious reduction of the outstanding uncovered note issue and a greater concentration and strengthening of the gold reserve;

And, furthermore, the bringing into effect of the "machinery, which long experience has shown to be the only effective remedy for an adverse balance of trade

and an undue growth of credit." This machinery is defined as "the raising and making effective of the Bank of England's discount rate, which before the war operated to check a foreign drain of gold and the speculative expansion of credit." "This necessity," the report says, "cannot, and should not, be evaded by any attempt to continue differential rates for home and foreign money after the war."⁴

Lord Cunliffe's sound advice to let business return as soon as possible into its old and tried channels will no doubt be heartily acclaimed by our business men and bankers.

Under the able leadership of the Secretary of the Treasury—in whose retirement we regretfully lose a courageous and efficient general, deserving of the country's deep gratitude,—our task of war financing has been most brilliantly performed. The Federal Reserve System, now unfolded to a position of power and influence far beyond the early expectations of its very proponents, and the banks of the country, placed through it upon a new basis of safety and of wider scope of operation, will show themselves physically and intellectually equipped for their larger tasks whenever the moment comes for the Treasury safely and properly to return to a peace footing in the exercise of its own functions.

May I avail myself of this opportunity to state that I believe the country is to be sincerely congratulated upon Hon. Carter Glass's appointment as our next Secretary of the Treasury. Nobody has done more in formulating and passing the Federal Reserve Act than he. Nobody has rendered greater services than he in keeping out of harm's way the schemers and dreamers that might have endangered or wrecked our banking structure. The country is deeply indebted to him today, and I am certain that as Secretary of the Treasury he will add further distinction to his record of public service. Through five years of intimate association, I have grown to know and sincerely admire this unassuming and unselfish man as one of our finest citizens and as a fearless fighter sacrificing himself without stint or reserve for whatever

⁴The report is significant, furthermore, in its unqualified recommendation that "the gold reserves of the country should be held by one central institution and that all banks should transfer any gold now held by them to the Bank of England." That is exactly the policy the Federal Reserve Board persistently urged upon Congress, a policy fortunately adopted and since enacted into law. Without such amendment it would have been impossible for the Federal Reserve System to accumulate the more than \$2,000,000,000 of gold which enabled it successfully to stand the unprecedented strain of financing the war.

he deemed to be best for the country. I consider it a privilege to be permitted to pay him this tribute.

As military victory could not be won without the loss of lives, so financial victory could not be secured without economic sacrifices, not only of a material character, but also of principles which normally we hold dear. Inflation of prices and temporary surrender of individual freedom of operation are cases in point. Success having been achieved, we now are starting to wend our way back. We have fairly well reached the top of the mountain: we do not exactly know whether it is a peak or a high plateau. The transition period will keep us moving over it, and then gradually, as we ascended, we shall have to descend through the period of reconstruction, until we reach the normal level of the future.

Happily, in the case of finance, the course of our path lies fairly clearly ahead of us, because the relations between government and business had been defined by the Federal Reserve Act on a modern and satisfactory basis before the war broke out. In banking, the formula for private operation under government control had been found and put into effect. Conditions are not so clear with respect to other and similar problems, such, *e.g.*, as the railroads, the financing of which forms a part of our program, which it would lead too far here to discuss. This only we might say in conclusion:

The war has accentuated and vastly accelerated the growth of government responsibility and influence in business. This development is world-wide at this time, it is natural, logical and inevitable. While it will tend to elevate business, there is danger that unless carefully safeguarded in both form and scope, it may tend to corrupt and to debauch government. It is this peril that we are facing at the moment of our proudest triumph, and it must be our serious concern that a national effort born in idealism should not bear the seeds of ultimate national decline. The reconstruction period places us face to face with this problem and it is during this period that thoughts will have to be developed leading to a solution entirely fair to the people.

In the case of the railroads, it is not solely a question between security holders and shippers; it is a question which affects on the one hand the integrity and safety of our future political life, on the

other the very foundation of our economic development. The next year or two must bring forth legislation which ought to be for the railroads what the Federal Reserve Act has been for the banks. To find the proper formula will be a national contribution of the highest order. It will be a difficult task, but just for that reason one worthy of the efforts of the best minds of the country. It is not solely a question of railroad technique or finance. A larger problem is involved, one that will face us at every future step in the evolution of the relation between government and private enterprise, the problem of finding men big, trustworthy, expert and independent enough to measure up to the task, and to make the task independent, clean, non-partisan and dignified enough to measure up to the men.

Until that phase of the problem is solved, government regulation or operation in times of peace will remain imperfect and fraught with dangers threatening to outweigh its benefits. No time ever was more propitious than the present for making a determined start in this direction.

The reconstruction period is pregnant with the seeds of good or evil; what it brings forth will depend upon the care and devotion that the country gives to its problems. It is a period, as its name indicates, for constructive thought, not for destructive criticism. If the flower of our manhood is willing to serve the country during reconstruction and peace as it did in times of war, and if the country's new and larger duties, and its higher conceptions of them have taught it to want as its servants none but the truly best, then we may look into the future with hope and confidence that we may prove ourselves competent and faithful guardians of the sacred trust which this glorious period has placed into our hands.

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I have the honor to acknowledge the receipt of your letter of the 10th inst. and in reply to inform you that the same has been forwarded to the proper authorities for their consideration. The Journal is published for the American Association of Engineers, Architects, and Surveyors, and is intended to be a medium for the exchange of information and ideas among the members of the Association. It is published monthly, except during the summer months, when it is published bi-monthly. The Journal is published by the American Association of Engineers, Architects, and Surveyors, 1201 Broadway, New York, N. Y.

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APPENDIX

Colleges and Universities

Not Used in this Volume

THE UNIVERSITY

AMERICAN

Harvard University

University of California

University of Chicago

University of Wisconsin

University of Michigan

Columbia University

University of Pennsylvania

University of Illinois

University of Minnesota

Cornell University

University of Maryland

Carnegie Institution

New York University

